



Two Tickets Plus



Group 1K

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Narrative

Purpose

This book contains a set of diagrams and explanations that illustrates the benefits we offer your company. We demonstrate the capabilities of the system we propose, and then identify possible risks and costs. We define the system's scope diagram and the classifications the database can hold. The book then breaks down how this information will be processed and in what order, the contact the user will have with the system to obtain particular data, the list of the events likely to occur and the system's reaction, and finally how the interface will appear to the user. Then, we describe what basic reports will be possible to generate, what alternatives we recommend after completing the research, what choices you have for selecting a degree of automation, and the possible approaches for implementation of the system.

System Capabilities

In this section, we define the capabilities your new system will provide based upon the problem you described to us. We will set preconfigured seating arrangements so you may continue to add new formations for future events, set up new pricing groups, and coordinate between your local venue and other foreign venues to reach an expanded source of customers.

Business Benefits

The system will permit a decrease in cost by accurately showing which seats are available for purchase, as well as the price group of the available seat. Documentation for every transaction to develop crucial reports will be included. We describe how the new system will raise revenue by increasing tickets sales, simplify the process of acquiring a ticket, and generate accurate reports to show where improvement is needed.

Development Costs

The development costs will arise from three areas: personnel, hardware, and other. Personnel will include our team of four: Matt Thomas, Katie Preston, Adam Wride, and Steve Collins. Hardware costs will include various categories of computers, servers, routers, and network connections. The "other" category includes software, collocation, and user testing. The total estimated development costs are \$391, 920.

Feasibility and Risk Assessment

There are five types of feasibility: economic, organizational, technological, and schedule. They are outlined as follows:

- **Economic:** Total development costs
- **Organizational:** Requirement for new operating system, clerk training, and possible morale issues as staff may feel threatened by new system
- **Technological:** Java and mySQL will be used to program, and may necessitate the use of outside consulting aid

- **Schedule:** There will be a set deadline with milestones to judge our progress along the way, and there will be outside consultants to audit work done.

Project Plan

The project plan is a work breakdown structure (WBS). A WBS is a hierarchy of activities and phases that the project will follow. It includes a Gantt chart, which is a bar graph representation showing the length of each phase. We also show who will work on each task, the amount of days blocked out for the task, and in what order the tasks will be accomplished.

Context Diagram

The context diagram shows the project scope. We show the interaction between our system and the clerk, the bank, and the venue manager.

Class Diagram

The class diagram shows the different classifications into which we will fit each instance of data. From these classifications we can derive the relationship between the classes. The class diagram also shows the requirements needed for the database to hold all of the established information.

Relational Database Schema

The relational database schema is the conceptual model class diagram translated into a relational form showing primary keys, foreign keys, etc. It stores this information in tables that can be accessed by a query language, such as SQL.

CRUD Analysis

The CRUD (Create, Read, Update, and Delete) Analysis is used to verify that the activities we have listed in the event table will allow each class from the class diagram to have CRUD performed. If the activities do not fulfill this requirement, we create activities that do.

Event Table

The event table shows the different events and how the system will react to each. It breaks down the sequence into the event, the source, the activity, and the destination. The source is who asked the system to do the task, the activity is the process that is being performed, and the destination is where the acquired information will end up.

Graphical User Interfaces (GUIs)

These GUIs show what the user will actual see when interacting with the system. These are just mockups to provide a general idea for visualization.

Use Cases

Use cases are used to show how the user will interact with the system to reach a defined outcome. We show examples of Add a Customer, Add New Venue, Add New Section, Add New Event, etc.

System Sequence Diagram (SSD)

The SSD shows the inputs and outputs between the system and the user for the same examples as the use case. Besides the inputs and outputs, the communication of messages is also illustrated.

Activity Diagram

The activity diagram shows the sequence of steps it takes to complete one task or transaction. The activity diagram follows the same examples as listed above.

Events Reports

These are mockup reports showing the kind of information that is available through inquiries into our system. We illustrate with a venue invoice, event summary, monthly revenue report.

Scope of Automation

This is a breakdown of the level of automation we could implement. For example, to check seat availability, we could have the clerk access the database to search for seats (low end automation) or we could have a real-time system (moderate automation).

Hardware Recommendations

We explain what equipment we will use to implement the system. We include the main theater site, a remote theater, and possibilities for expansion in the future. We recommend Dell as the provider for computers and Cisco for routers.

Recommendations for Implementation

The recommendations show a possible alternative of buying a software package that was created outside our project. The software provider we recommend is Vendini. They would sell us the software needed to fulfill the demands of your company. We have the software broken down by different categories such as general, functional, technical. Next we have a weighted table that compares our in-house option with the alternative.

System Overview

System Capabilities

- Simple configuration of venue layouts based on type of event (i.e. concert, sporting event)
- Easy setup of pricing groups within the venue
- Create a Two Tickets Plus network of entertainment providers:
 - **Local venue:**
 - Price tickets based on event (time of day and day of week), seat location, and pricing group
 - Price tickets using account group sales, Tuesday night specials, coupons, and manual discounts
 - Price account package using number of events, the run (days of week), the seat, and shipping and handling charges
 - Send out invoices to corporate customers
 - Handle return ticket process making seats available for resale
 - Handle credit card, check, and cash sales
 - Process exchanges
 - Maintain customer billing information and purchasing history database
 - **Foreign Sales**
 - Sell tickets to patrons of other venues
 - Track what portion of sales received for foreign sales

Business Benefits

- Increase revenue through:
 - Increased number of ticket sales location for any event within the network
 - Ease for customers to buy tickets from any venue
 - Increased attendance at events
 - More efficiency in selling all seats
 - Accurate, up-to-date tracking of tickets – never mistakenly sell the same ticket twice
 - Increase patrons' visits to network affiliated productions
 - Faster sales through Two Tickets Plus seat availability screen
 - Ability to run more promotions based on availability of tickets
 - More easily recognize shows with too many empty seats

Development Costs

Personnel

Matt Thomas	\$69,160
Steve Collins	\$45,800
Katie Preston	\$69,900
Adam Wride	\$93,860

Hardware

Computers	\$47,000
Servers (2)	\$50,500
VPN Routers (2)	\$1,000
Fiber Optic Connections	\$5,000

Other

Software Costs	\$5,500
Collocation	\$1,000
User Testing	\$1,200

Total	\$391,920
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Assumptions:

- All salary costs before taxes
- 30 weeks
- Project Management by Adam Wride
- All work performed by Matt Thomas, Steve Collins, Katie Preston, and Adam Wride
- User Testing -- 10 clerks for 4 hours at \$10/hr (do 3 times) \$400

Feasibility and Risk Assessment

Economic:

- Project costs forecasted with fully resourced project plan
- Total development cost: \$391,920

Organizational and Cultural:

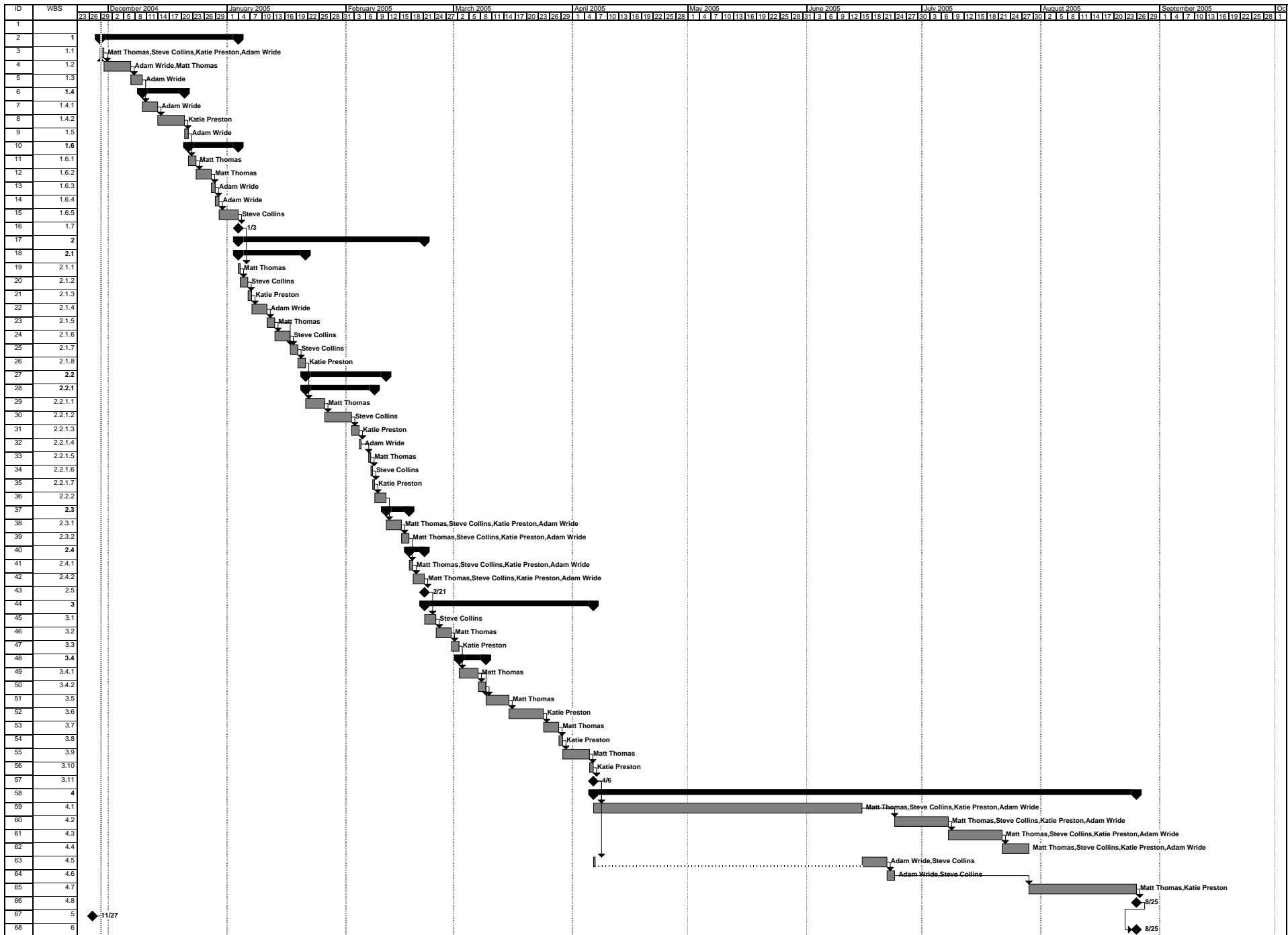
- Venue clerks currently do not operate Windows XP workstations (TT+ required OS)
- TT+ and venue management failure to train clerks may result in failed adoption
- Venue marketing departments may feel the venue sales departments are attempting to take control of the customer relationship

Technological and Resource:

- TT+ to be written in standards based JAVA
- TT+ database to use open-source mySQL
- First standalone system built by this team
- No forecasted need for consultants, but an unforeseen skill need may require an outside consultant

Schedule:

- Full project plan completed to known level of detail
- No artificial deadline driving project forcing unrealistic timeline
- Milestones designated at the end of each phase
- Contingency plans call for outside consultants to audit work done or to certify work completed is done to industry standards



Project: projectPlanTT+
Date: Mon 11/29/04

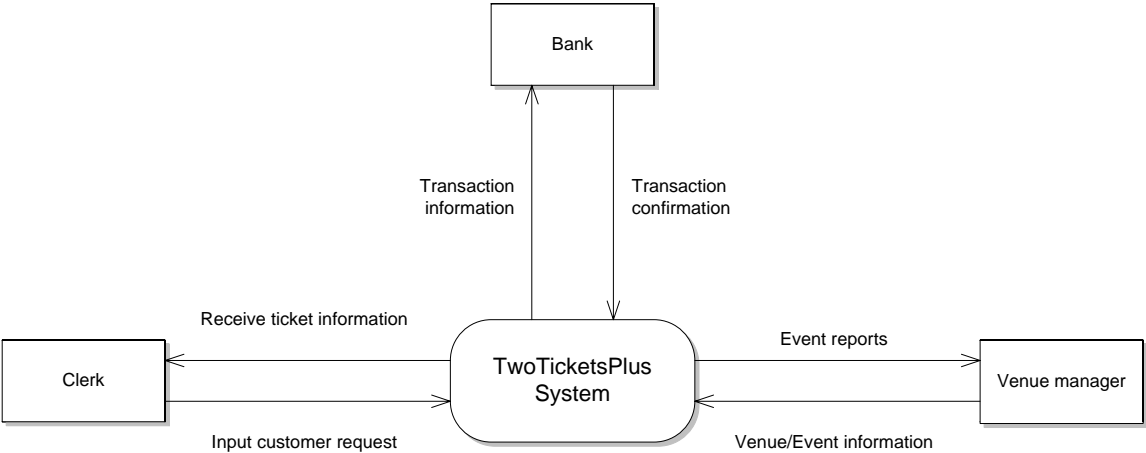


ID	WBS	Task Name	Duration	Start	Finish	Predecessors	Resource Names
1							
2	1	Planning Phase	26 days	Mon 11/29/04	Mon 1/3/05		
3	1.1	Kickoff meeting	1 day	Mon 11/29/04	Mon 11/29/04	67	Matt Thomas,Steve Collins,Katie Preston,Adam Wride
4	1.2	Develop system scope	5 days	Tue 11/30/04	Mon 12/6/04	3	Adam Wride,Matt Thomas
5	1.3	Develop schedule	3 days	Tue 12/7/04	Thu 12/9/04	4	Adam Wride
6	1.4	Staff project	7 days	Fri 12/10/04	Mon 12/20/04		
7	1.4.1	Conduct preliminary training and team building exercises	2 days	Fri 12/10/04	Mon 12/13/04	5	Adam Wride
8	1.4.2	Identify programmers	5 days	Tue 12/14/04	Mon 12/20/04	7	Katie Preston
9	1.5	Create milestones	1 day	Tue 12/21/04	Tue 12/21/04	8	Adam Wride
10	1.6	Feasibility	9 days	Wed 12/22/04	Mon 1/3/05		
11	1.6.1	Estimate cost analysis	2 days	Wed 12/22/04	Thu 12/23/04	9	Matt Thomas
12	1.6.2	NPV, Payback period	2 days	Fri 12/24/04	Mon 12/27/04	11	Matt Thomas
13	1.6.3	Check availability of staff / contractors	1 day	Tue 12/28/04	Tue 12/28/04	12	Adam Wride
14	1.6.4	Check schedule feasibility	1 day	Wed 12/29/04	Wed 12/29/04	13	Adam Wride
15	1.6.5	Identify venue culture and how they will react to new system	3 days	Thu 12/30/04	Mon 1/3/05	14	Steve Collins
16	1.7	Launch project	0 days	Mon 1/3/05	Mon 1/3/05	15	
17	2	Analysis Phase	34.5 days	Tue 1/4/05	Mon 2/21/05		
18	2.1	Research Industry	13.5 days	Tue 1/4/05	Fri 1/21/05		
19	2.1.1	Research discounts	0.5 days	Tue 1/4/05	Tue 1/4/05	16	Matt Thomas
20	2.1.2	Research transactions	2 days	Tue 1/4/05	Thu 1/6/05	19	Steve Collins
21	2.1.3	Identify stakeholders	1 day	Thu 1/6/05	Fri 1/7/05	20	Katie Preston
22	2.1.4	Identify seating configurations	2 days	Fri 1/7/05	Tue 1/11/05	21	Adam Wride
23	2.1.5	Interview users	2 days	Tue 1/11/05	Thu 1/13/05	22	Matt Thomas
24	2.1.6	Interview venue management	2 days	Thu 1/13/05	Mon 1/17/05	23	Steve Collins
25	2.1.7	Interview venue owners	2 days	Mon 1/17/05	Wed 1/19/05	24,23	Steve Collins
26	2.1.8	Interview venue customers	2 days	Wed 1/19/05	Fri 1/21/05	25	Katie Preston
27	2.2	Current system	15 days	Fri 1/21/05	Fri 2/11/05		
28	2.2.1	Documentation of Business Processes	12 days	Fri 1/21/05	Tue 2/8/05		
29	2.2.1.1	Observing current business processes	3 days	Fri 1/21/05	Wed 1/26/05	26	Matt Thomas
30	2.2.1.2	Document with activity diagram	5 days	Wed 1/26/05	Wed 2/2/05	29	Steve Collins
31	2.2.1.3	Ticket procedure	2 days	Wed 2/2/05	Fri 2/4/05	30	Katie Preston
32	2.2.1.4	Box office hours	0.5 days	Fri 2/4/05	Fri 2/4/05	31	Adam Wride
33	2.2.1.5	Posting events	0.5 days	Mon 2/7/05	Mon 2/7/05	32	Matt Thomas
34	2.2.1.6	Advertising	0.5 days	Mon 2/7/05	Mon 2/7/05	33	Steve Collins
35	2.2.1.7	Run time of events	0.5 days	Tue 2/8/05	Tue 2/8/05	34	Katie Preston
36	2.2.2	Document customer expectations	3 days	Tue 2/8/05	Fri 2/11/05	35	
37	2.3	Build prototype	4 days	Fri 2/11/05	Thu 2/17/05		
38	2.3.1	Conduct Joint Application Design	2 days	Fri 2/11/05	Tue 2/15/05	36	Matt Thomas,Steve Collins,Katie Preston,Adam Wride
39	2.3.2	Follow up on Prototype	2 days	Tue 2/15/05	Thu 2/17/05	38	Matt Thomas,Steve Collins,Katie Preston,Adam Wride
40	2.4	Validate	2 days	Thu 2/17/05	Mon 2/21/05		
41	2.4.1	Walk through	1 day	Thu 2/17/05	Fri 2/18/05	39	Matt Thomas,Steve Collins,Katie Preston,Adam Wride
42	2.4.2	Compare prototype to system capabilities	1 day	Fri 2/18/05	Mon 2/21/05	41	Matt Thomas,Steve Collins,Katie Preston,Adam Wride
43	2.5	Analysis complete	0 days	Mon 2/21/05	Mon 2/21/05	42	
44	3	Design phase	32 days	Mon 2/21/05	Wed 4/6/05		

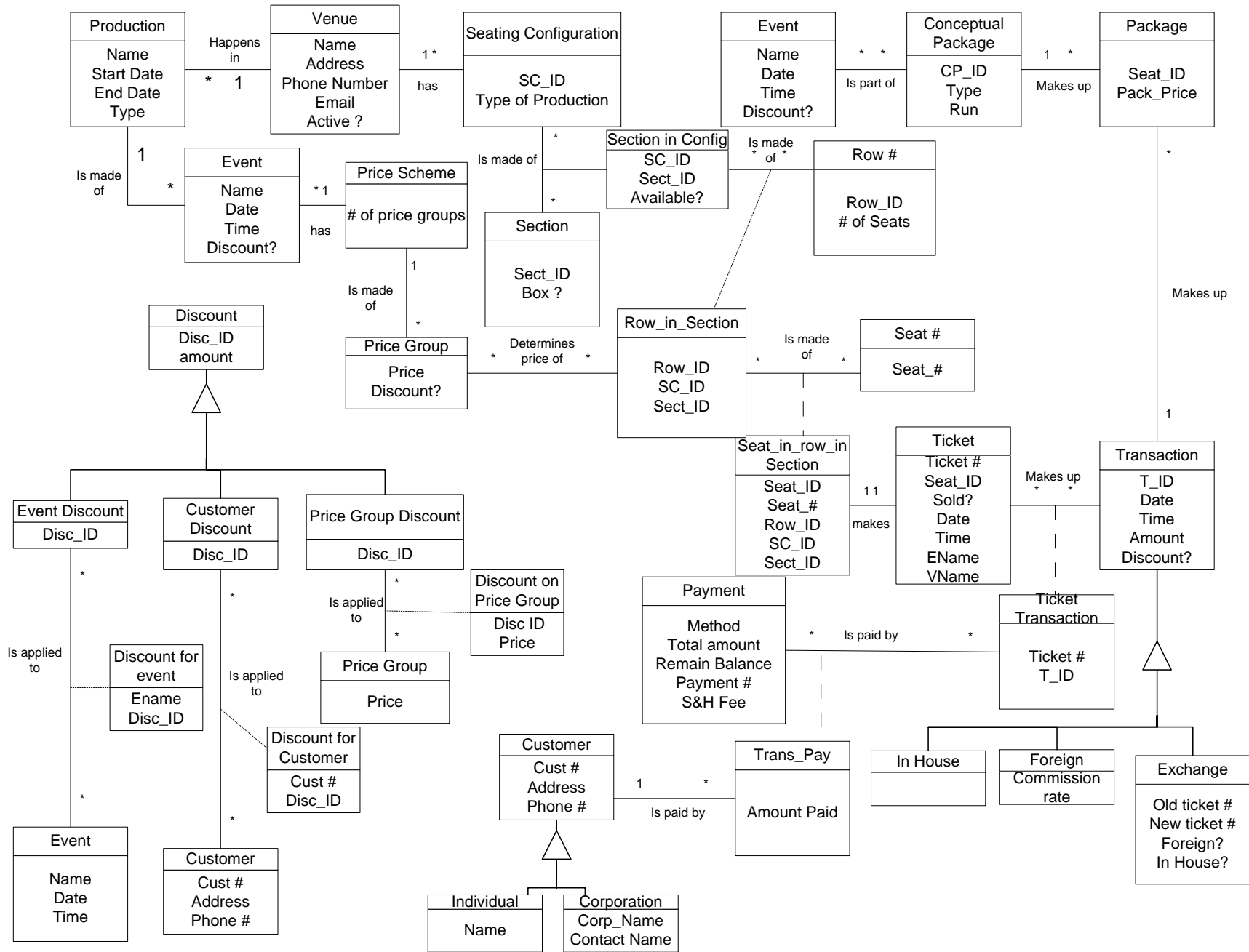
ID	WBS	Task Name	Duration	Start	Finish	Predecessors	Resource Names
45	3.1	Create DFD	3 days	Mon 2/21/05	Thu 2/24/05	43	Steve Collins
46	3.2	Build structure chart	2 days	Thu 2/24/05	Mon 2/28/05	45	Matt Thomas
47	3.3	Create layer design	2 days	Mon 2/28/05	Wed 3/2/05	46	Katie Preston
48	3.4	Design database	5 days	Wed 3/2/05	Wed 3/9/05		
49	3.4.1	Create classes and attributes	3 days	Wed 3/2/05	Mon 3/7/05	47	Matt Thomas
50	3.4.2	Create relational schema	2 days	Mon 3/7/05	Wed 3/9/05	49	
51	3.5	Create network architecture	4 days	Wed 3/9/05	Tue 3/15/05	49,50	Matt Thomas
52	3.6	Create user interface	7 days	Tue 3/15/05	Thu 3/24/05	51	Katie Preston
53	3.7	Create manual conversion	2 days	Thu 3/24/05	Mon 3/28/05	52	Matt Thomas
54	3.8	Create support controls	1 day	Mon 3/28/05	Tue 3/29/05	53	Katie Preston
55	3.9	Create security controls	5 days	Tue 3/29/05	Tue 4/5/05	54	Matt Thomas
56	3.10	Create design controls	1 day	Tue 4/5/05	Wed 4/6/05	55	Katie Preston
57	3.11	Create design phase complete	0 days	Wed 4/6/05	Wed 4/6/05	56	
58	4	Implementation	101.5 days	Wed 4/6/05	Thu 8/25/05		
59	4.1	Develop application	50 days	Wed 4/6/05	Wed 6/15/05	57	Matt Thomas,Steve Collins,Katie Preston,Adam Wride
60	4.2	Perform quality assurance	10 days	Fri 6/24/05	Thu 7/7/05	59	Matt Thomas,Steve Collins,Katie Preston,Adam Wride
61	4.3	Convert data (population of databases)	10 days	Fri 7/8/05	Thu 7/21/05	60	Matt Thomas,Steve Collins,Katie Preston,Adam Wride
62	4.4	Install application at first customer location	5 days	Fri 7/22/05	Thu 7/28/05	61	Matt Thomas,Steve Collins,Katie Preston,Adam Wride
63	4.5	Document all development	5 days	Wed 4/6/05	Tue 6/21/05	57	Adam Wride,Steve Collins
64	4.6	Train users	2 days	Wed 6/22/05	Thu 6/23/05	63	Adam Wride,Steve Collins
65	4.7	Perform Maintenance and System Enhancement	20 days	Fri 7/29/05	Thu 8/25/05	64	Matt Thomas,Katie Preston
66	4.8	Implementation complete	0 days	Thu 8/25/05	Thu 8/25/05	65	
67	5	Start	0 days	Sat 11/27/04	Sat 11/27/04		
68	6	Finish	0 days	Thu 8/25/05	Thu 8/25/05	66	

Initial Analysis

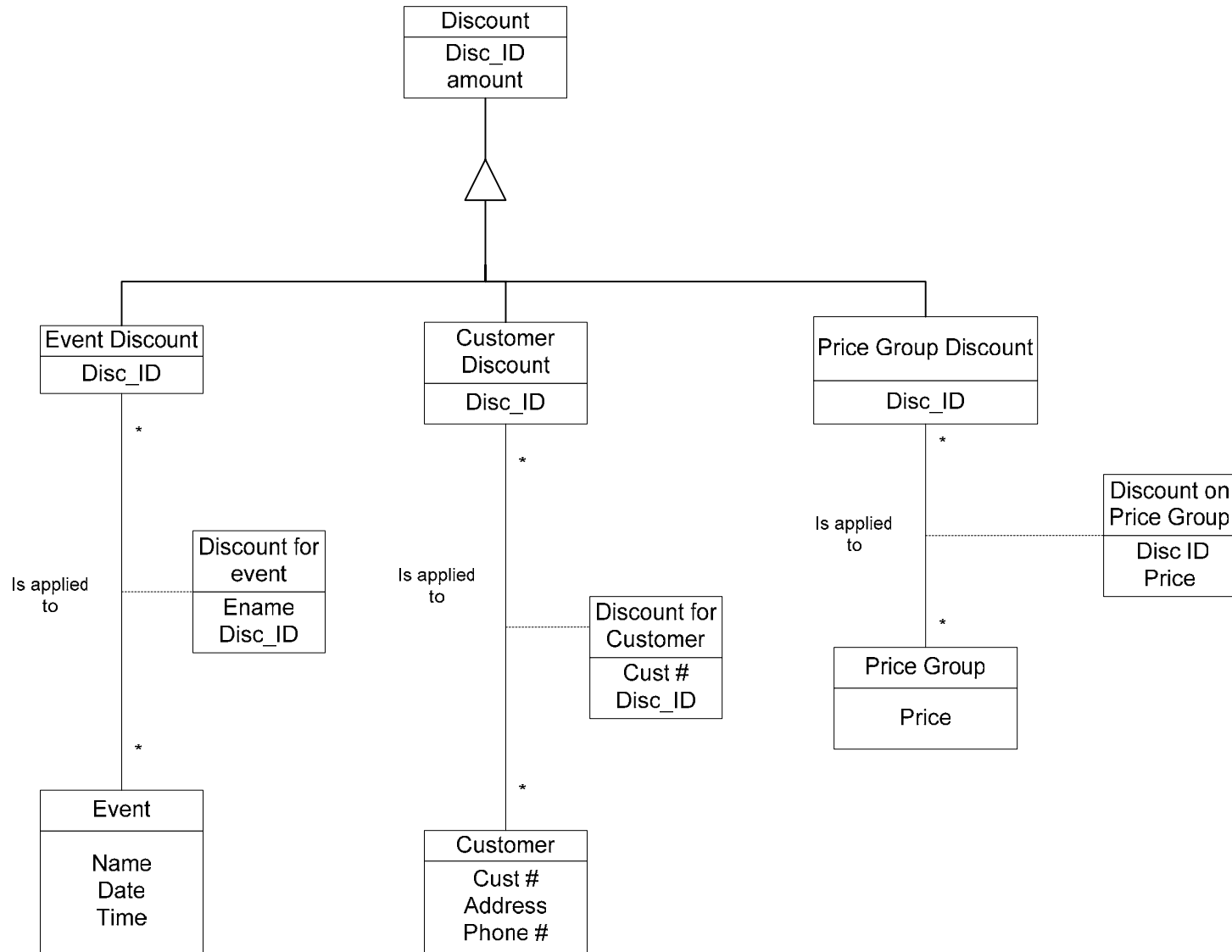
Context Diagram



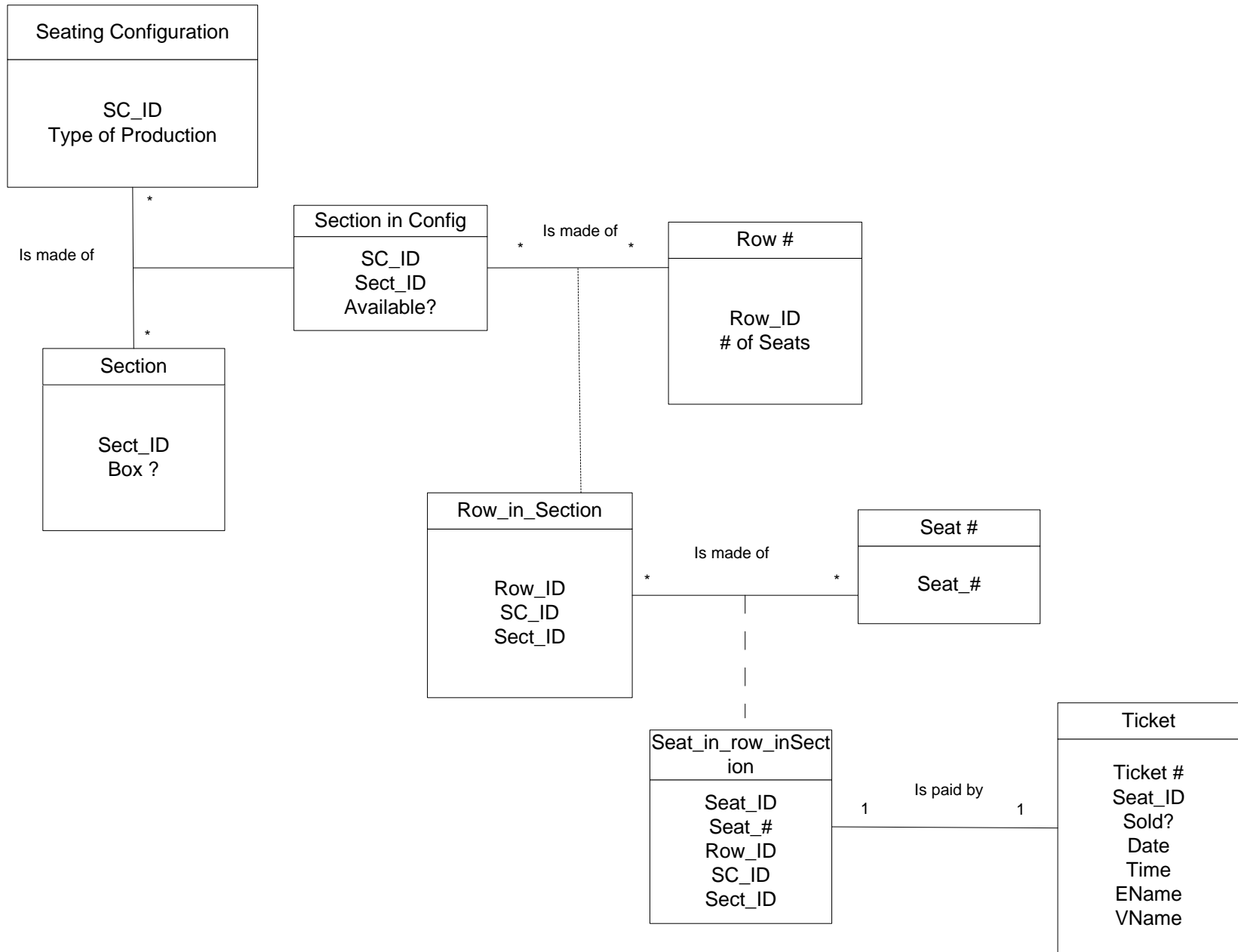
Conceptual Diagram



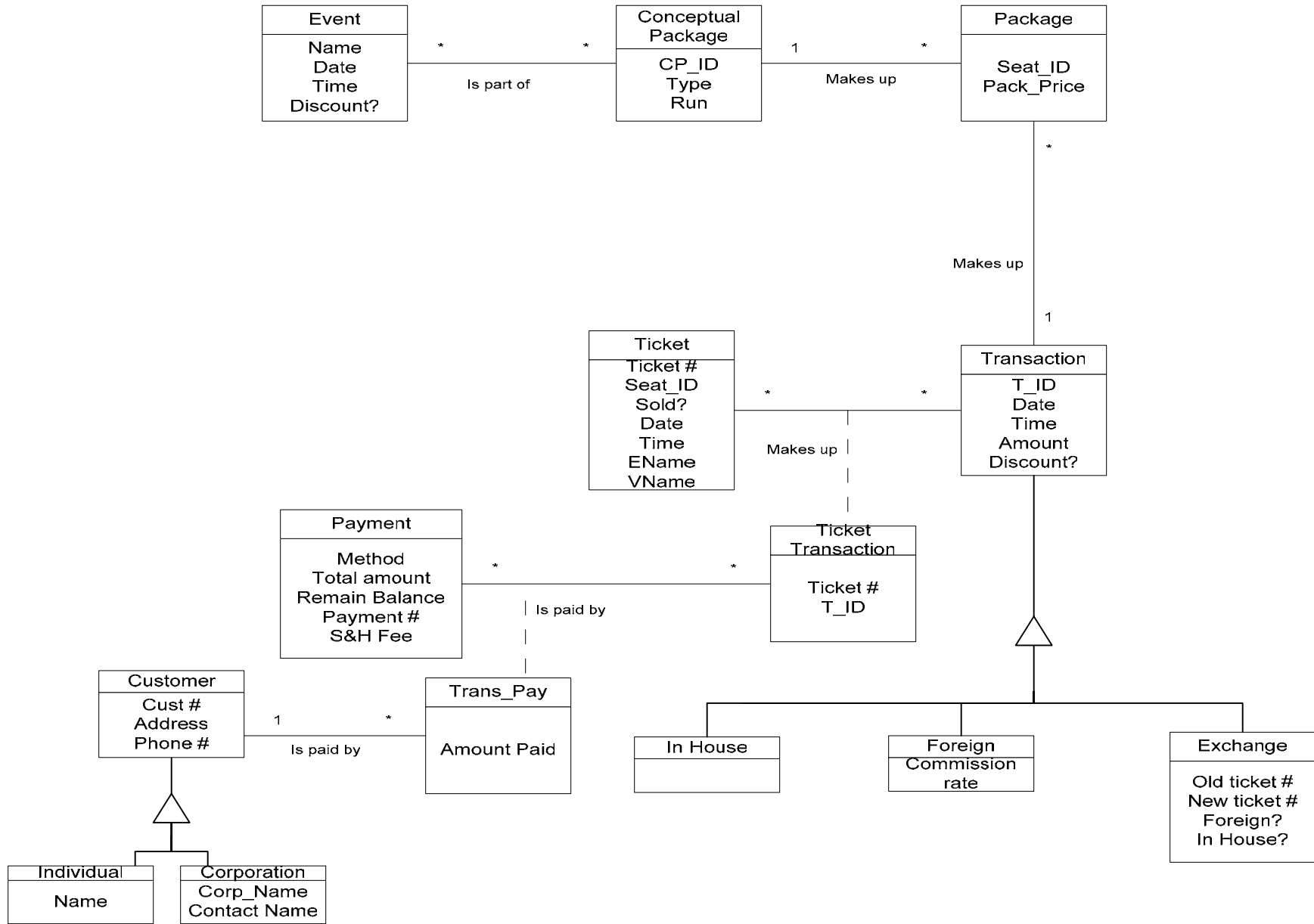
Discount Detail



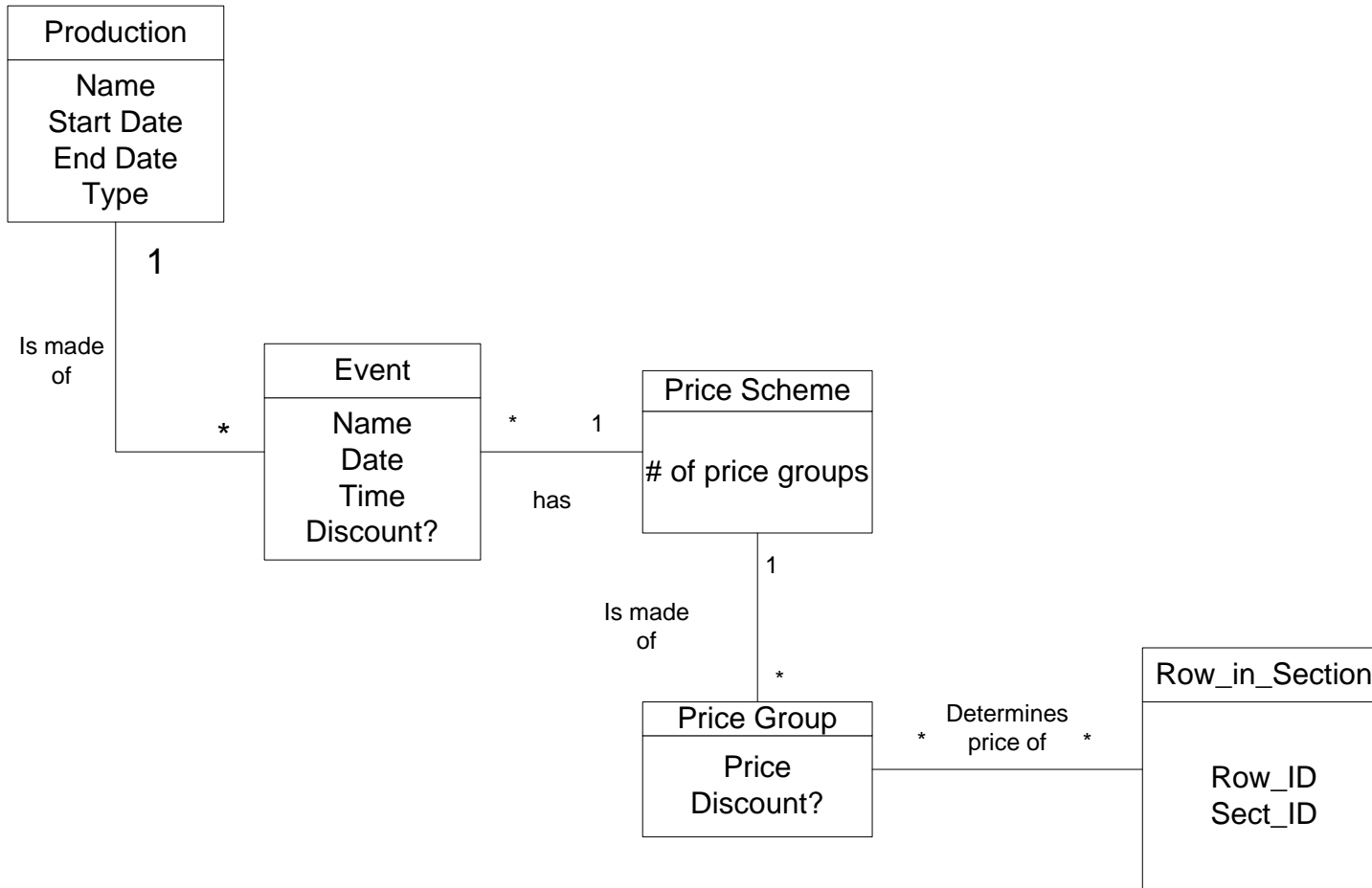
Seating Detail



Transaction Detail



Price Schema Detail



Relational Database Schema

Venue(VName, Address, Phone Number, Email, Active?)

Production(PName, VName, Start Date, End Date, Type)

FK: VName references Venue

Event(EName, PName, PS_ID, date, time, discount?)

FK: PName references Production, PS_ID refs Price Scheme

Seating Configuration(SC_ID, VName, Type)

FK: VName references Venue

Price Scheme(PS_ID, # of price groups)

Price Group(Price, PS_ID, discount?)

FK: PS_ID references Price Scheme

Section (Sect_ID, Box?)

Section in Config (SC_ID, Sect_ID, Available?)

FK: SC_ID references Seating Configuration, Sect_ID references Section

Row # (Row_ID, # of seats)

Row_In_Section(Row_ID, SC_ID, Sect_ID)

FK: Row_ID references Row#, SC_ID, Sect_ID refs Section in Config

Seat #(Seat #)

Seat_In_Row_In_Section(Seat_ID, Row_ID, SC_ID, Sect_ID, Seat #)

FK: Row_ID, SC_ID, Sect_ID reference Row_In_Section, Seat # reference Seat

Ticket(Ticket #, Seat_ID, date, time, EName, PName, VName, Price, Sold?)

FK: Seat_ID references Seat_In_row_In_Section, EName references Event, PName references Production, VName references Venue, Price references Price Group

Conceptual Package(CP_ID, Type)

Event in Conceptual Package(EName, CP_ID)

FK: EName references Event, CP_ID references Conceptual Package

Package(P_ID, CP_#, Seat_ID, Pack_Price)

FK: Seat_ID references Seat_In_row_in_Section

FK: CP_# references Conceptual Package

Transaction(T_ID, date, time, amount, discount?)

In House(T_ID)

FK: T_ID references Transaction

Foreign(T_ID, commission)

FK: T_ID references Transaction

Exchange(T_ID, E_ID, old ticket #, new ticket #, foreign?, In house?)

FK: T_ID references Transaction

Ticket Transaction(Ticket #, T_ID)

FK: Ticket # references Ticket, T_ID references Transaction

Payment(Payment #, method, total amount, remain balance, s + h fee)

Trans_Pay(Ticket #, T_ID, Payment #, Cust #, amount paid)

FK: Ticket #, T_ID reference Ticket Transaction, Payment # references Payment,

Cust # references Customer

Customer(Cust #, address, phone #, email)

Individual(Cust #, Name)

FK: Cust # references Customer

Corporation(Cust #, Corp_Name, Contact Name)

FK: Cust # references Customer

Discount(DiscID, amount)

Event Discount(DiscID)

FK: DiscID references Discount

Price Group Discount(DiscID)

FK: DiscID references Discount

Customer Discount(DiscID)

FK: DiscID references Discount

Discount for Event(EName, DiscID)

FK: EName references Event, DiscID references Event Discount

Discount for Customer(Cust #, DiscID)

FK: Cust# references Customer, DiscID references Customer Discount

Discount on Price Group(Price, DiscID)

FK: Price references Price Group, DiscID references Price Group Discount

CRUD Analysis

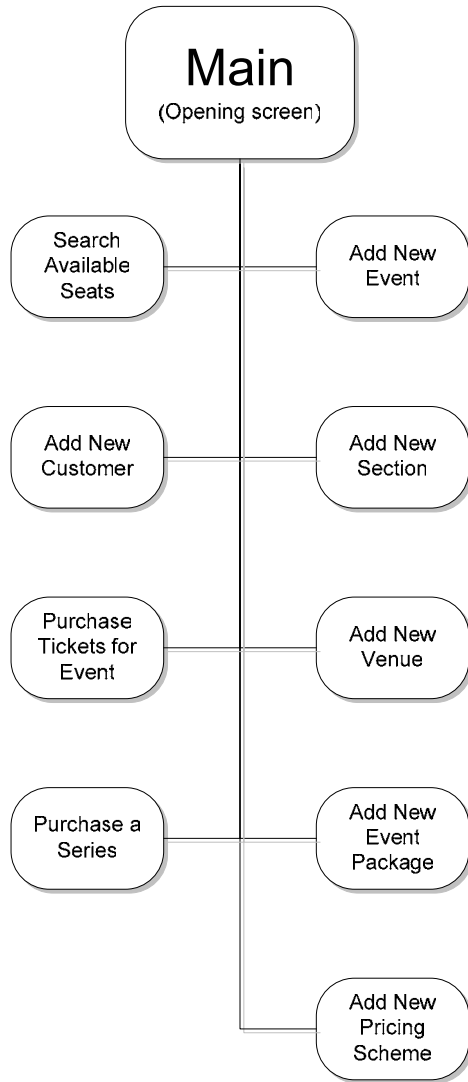
Activities	Data Entries															
	Venue	Production	Seating Configurations	Package	Conceptual Package	Exchange	Event	Section	Row	Seat	Price Group	Discount	Ticket	Transaction	Payment	Customer
Customer makes payment															C	CRUD
Customer returns ticket						CRUD							RUD	CRU	CRUD	CRUD
Clerk accesses ticket													R			
Clerk inquires to see if seat available	R	R	R				R	R	R	R	R	R				
Customer buys ticket													C	C	C	CRUD
Manager updates package				CRUD	CRUD											
Manager updates venue	CRUD	CRUD					CRUD									
Manager updates pricing scheme											CRUD					
Manager updates seating configuration			CRUD					CRUD	D	D						
Create production type																
Create seating configuration			CRUD													
Clerk inquires for discount												R				
Management enters new discount												CRUD				
Manager wants to see customers purchased																R
Manager creates reports	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Create price group for production											CRUD					

Event	Trigger	Source	Activity/Use Case	Response	Destination
PAYMENT					
Customer makes payment	payment	Customer	payment update customer info update payment info update payment info	receipt	Customer
Clerk enters payment information	ticket purchased	Clerk			
DISCOUNT					
Clerk applies discount	discount available	Clerk	Apply discount to transaction		
Manager inquires to see all discounts for an event	request for discount report	Management	produce discount report	discount report	Management
TRANSACTION					
Customer returns ticket	return ticket request	Customer	update availability of seat update customer info		
Customer buys ticket for foreign venue	ticket request	Customer	purchase ticket update commission update customer info update foreign ticket sales update seat availability	receipt	Customer
Customer buys ticket for in-house production	ticket request	Customer	purchase ticket update customer info update in-house sales update seat availability	receipt	Customer
Customer buys package	customer package request	Customer	purchase package update customer info update seat availability	receipt	Customer
Customer exchanges ticket	exchange request	Customer	update seat availability update customer info complete seat package exchange	receipt	Customer
Manager inquires to see all transactions over a time	request for transaction report	Management	produce transaction report	transaction report	Management
Customer requests extra receipts	Request for extra receipts	Customer	produce extra receipts	receipts	Customer
Management inquires for list of all seat sales for foreign venues for a period of time	request for foreign sales	Management	produce foreign sales report	foreign sales report	Management
Management inquires for list of all in house seat sales in a period of time	request for in-house sales	Management	produce in-house sales report	in-house sales report	Management
Management inquires for commission report	request for commission report	Management	produce commission report	commission report	Management
Management inquires for shipping and handling report	request for shipping report	Management	produce shipping report	shipping report	Management
TICKET					
Clerk inquires to see if seat available	clerk inquires for seat available	Clerk	seat inquiry	report of avail. Seats	clerk
Clerk inquires to see dates of production	clerk begins inquiry	Clerk	production inquiry	inquiry result	clerk
Management inquires about unsold tickets at an event	request for unsold seats	Management	produce report of unsold seats	unsold seats report	Management
REPORTS					
Time to produce ticket sales reports	End of month/week/day		produce ticket sales report	ticket sales report	Management
Time to produce event sales reports	End of month/week/day		produce event sales report	event sales report	Management
Time to produce production sales reports	End of month/week/day		produce production sales report	production sales report	Management
Time to produce return/exchange report	End of month/week/day		produce return/exchange report	return/exchange report	Management
Time to produce payment reports	End of month/week/day		produce payment report	payment report	Management
CUSTOMER					
Management inquires to see corporate sales over a period of time	request for corporate sales	Management	produce corporate sales report	corporate sales report	Management
Management inquires to see individual ticket sales over a period of time	request for individual sales	Management	produce individual sales report	individual sales report	Management
Management inquires to see all customers who bought seats to more than one event	request for customer sales	Management	produce customer sales report	customer sales report	Management
Enter new customer into system	new customer	Clerk	enter new customer info		
VENUE					
V. Manager inputs new venue information	New venue	Management	Add new venue to TwoTicketsPlus	Venue added confirmation	Management
V. Manager updates venue info	Venue info update	Management	Update venue information	Venue info update confirmation	Management
Time to produce summary report of all active venues	"End of week"	Management	Produce report of all active venues	Active venue report	Management
PRODUCTION					
V. manager inputs new production info	New production	Management	Add new production to TwoTicketsPlus	Confirm new production added	Management

Update production info	Update production info	Management	Update production information	Confirm production info changed	Management
PRODUCTION TYPE					
V. manager inputs new type of production info	New type of production	Management	Add new type of production to TwoTicketsPlus	Confirm new type of production added	Management
Update type of production info	Update type of production info	Management	Update type of production information	Confirm type of production info changed	Management
Inactivate type of production	Type of production no longer available	Management	Inactivate type of production	Confirm type of production inactivation	Management
VENUE PRODUCTION					
Customer wants to know where a play will show	Production location	Customer	Look up production location	Display production location	Customer
Preset seating configurations	New seating info for production type	Management	Add new type of production to TwoTicketsPlus	Confirm new type of production added	Management
V. manager inputs seating info for production type	Update seating info for production type	Management	Update type of production information	Confirm type of production info changed	Management
Update seating info for production type	Type of seating for production type	Management	Inactivate type of production	Confirm type of production inactivation	Management
Inactivate seating info for production type					
PRICE GROUP					
P. manager inputs new group pricing for section in production	New pricing group for specific section in production	Management	New pricing group for section in production	Confirm new pricing group for section in production	Management
P. manager changes group pricing for section in production	Update group pricing for section in production	Management	Update group pricing for section in production	Confirm update for section in production	Management
EVENT					
Clerk inquires for a discount	Request for available discount for event	Customer	Produce discount availability	Discount report	Customer and Clerk
Clerk applies discount	Customer chooses from available discounts	Customer	Apply discount to ticket	Confirmation of applied discount	Customer and Clerk
What events are found within a given production	Event/production relationship	Management	Look up events within a production	List events within a given production	Management


Functionality Breakdown

Site Map



Main Menu

Two Tickets Plus Main Menu



Availability

- Search Available Seats

Customer

- Add New Customer

Purchase

- Ticket for Event
- Purchase a Series of Events


Administrative Controls

- Add New Venue
- Add New Event
- Add New Section
- Add New Event Series
- Add New Pricing Scheme

Administrative Controls

Add New Venue

Two Tickets Plus - Add New Venue



Back to Main Menu

Reset Fields

Enter Foreign Venue Attributes

Enter New Venue Name

Enter Address

Street Address

City State Zip Code

Phone Number

801 123 4567


Commission Rate

0%

Add

Cancel

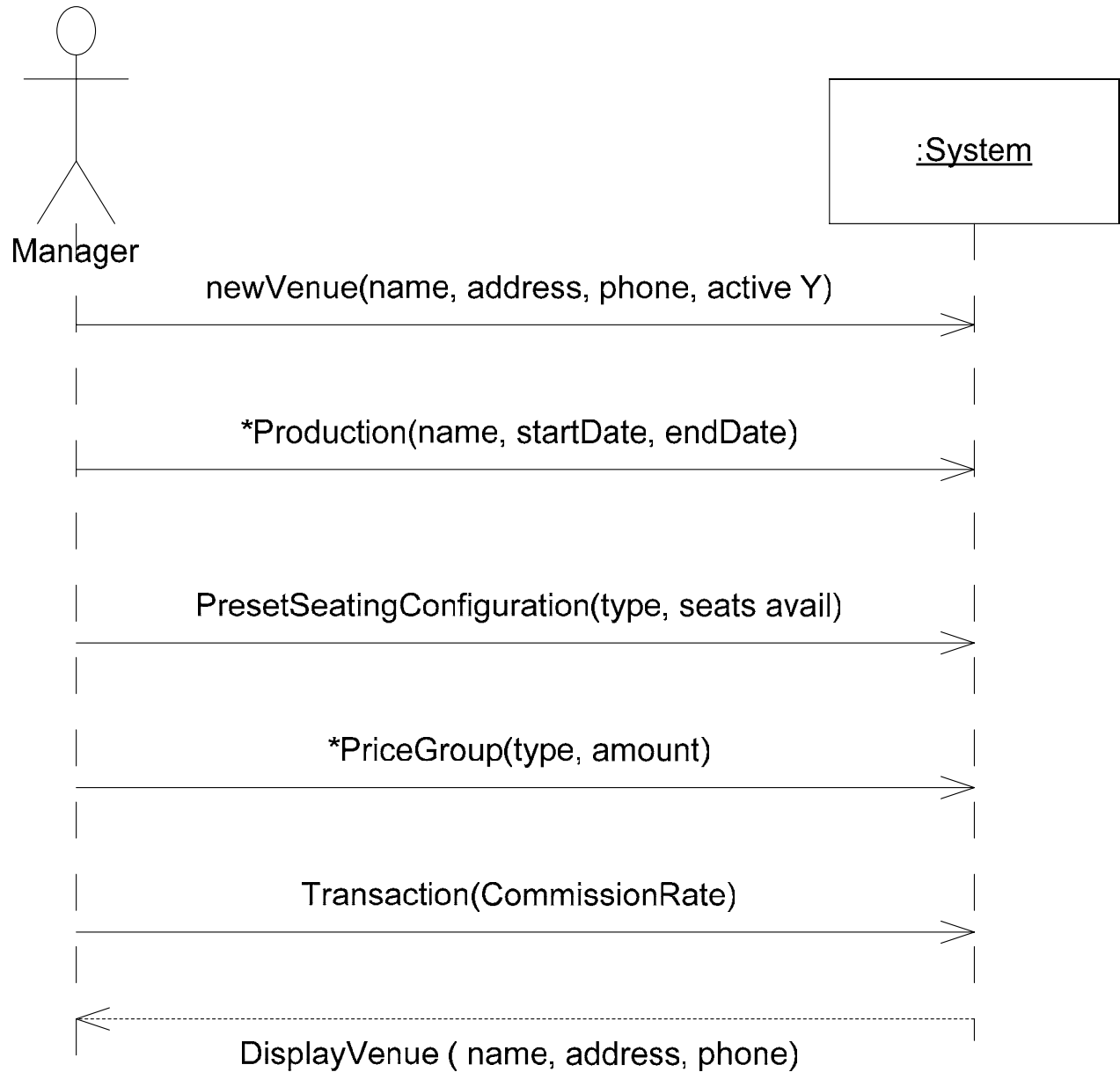
Adding New Venue



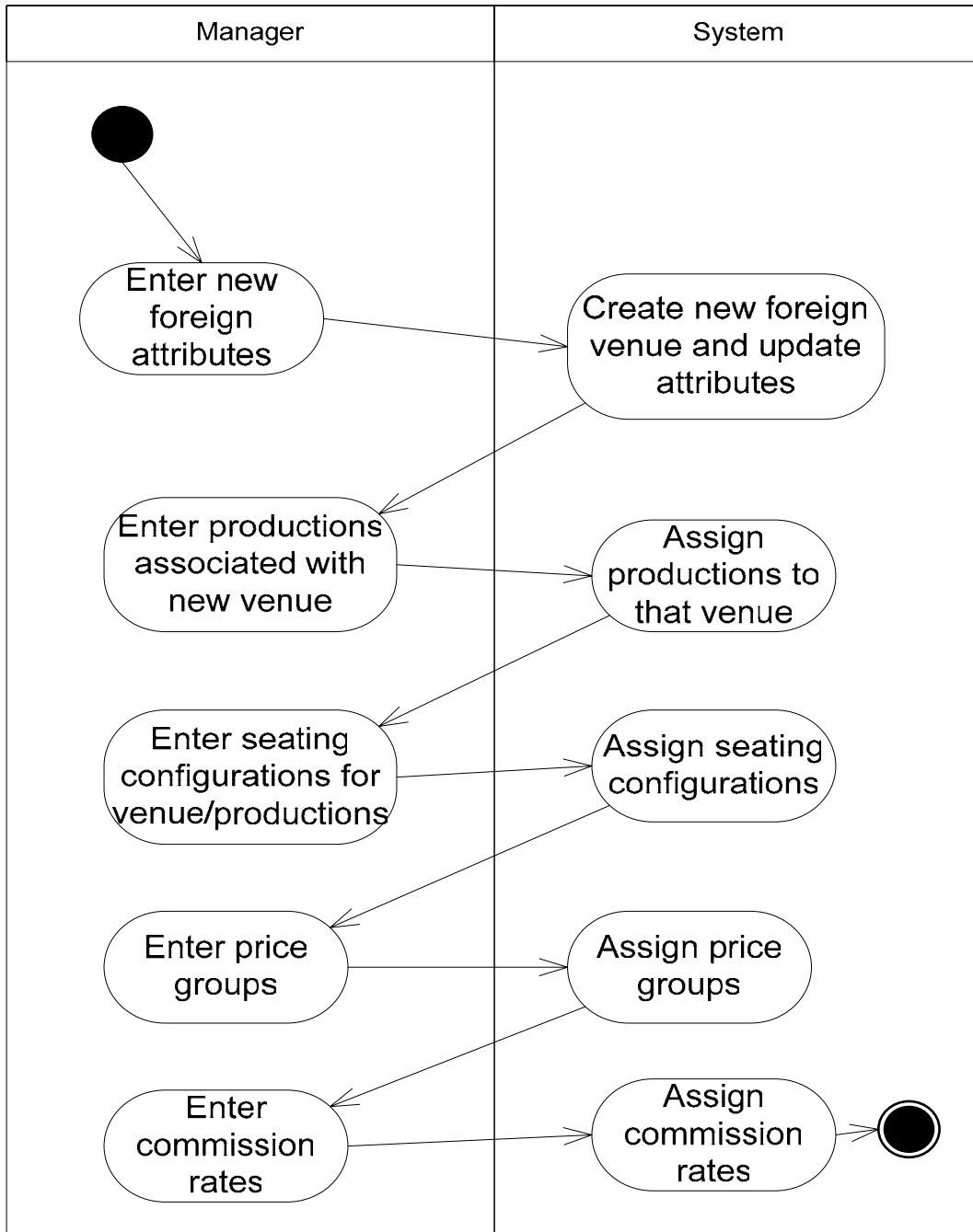
Use Case Description

Use Case Name:	Add a new venue (allow a new venue to sell tickets)	
Scenario:	New foreign venue needs to be added to system so sales for and from it can take place	
Triggering Events:	New foreign venue is added to system	
Brief Description:	New foreign venue is added to system so that both your venue and the foreign venue can sell each other's tickets	
Actors:	Management	
Related Use Cases:	Add Production, Add Seating Configuration, Add Price Group	
Stakeholders:	Management so they can keep track of foreign sales for this venue and associated commissions	
Preconditions:	Venue must already exist Foreign venue must exist	
Postconditions:	New foreign venue must be added to system	
Flow of Events:	Actor	System
	1. Enter new foreign venue attributes 2. Enter commission rates	1.1 Create new foreign venue and assign attributes to it 2.1. Assign commission rates
Exception Conditions:	2. Commission rates are not yet assigned	

System Sequence Diagram




Activity Diagram



Add New Section

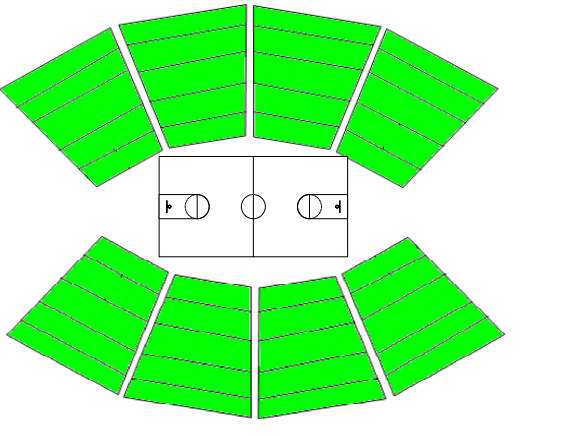
Two Tickets Plus - Add New Section



Back to Main Menu

Reset Fields

Select Area to be the New Section



If the Section is to be a Box Select Box ID

BOX 1123

Go


Add

Enter Name for Section

A

Cancel

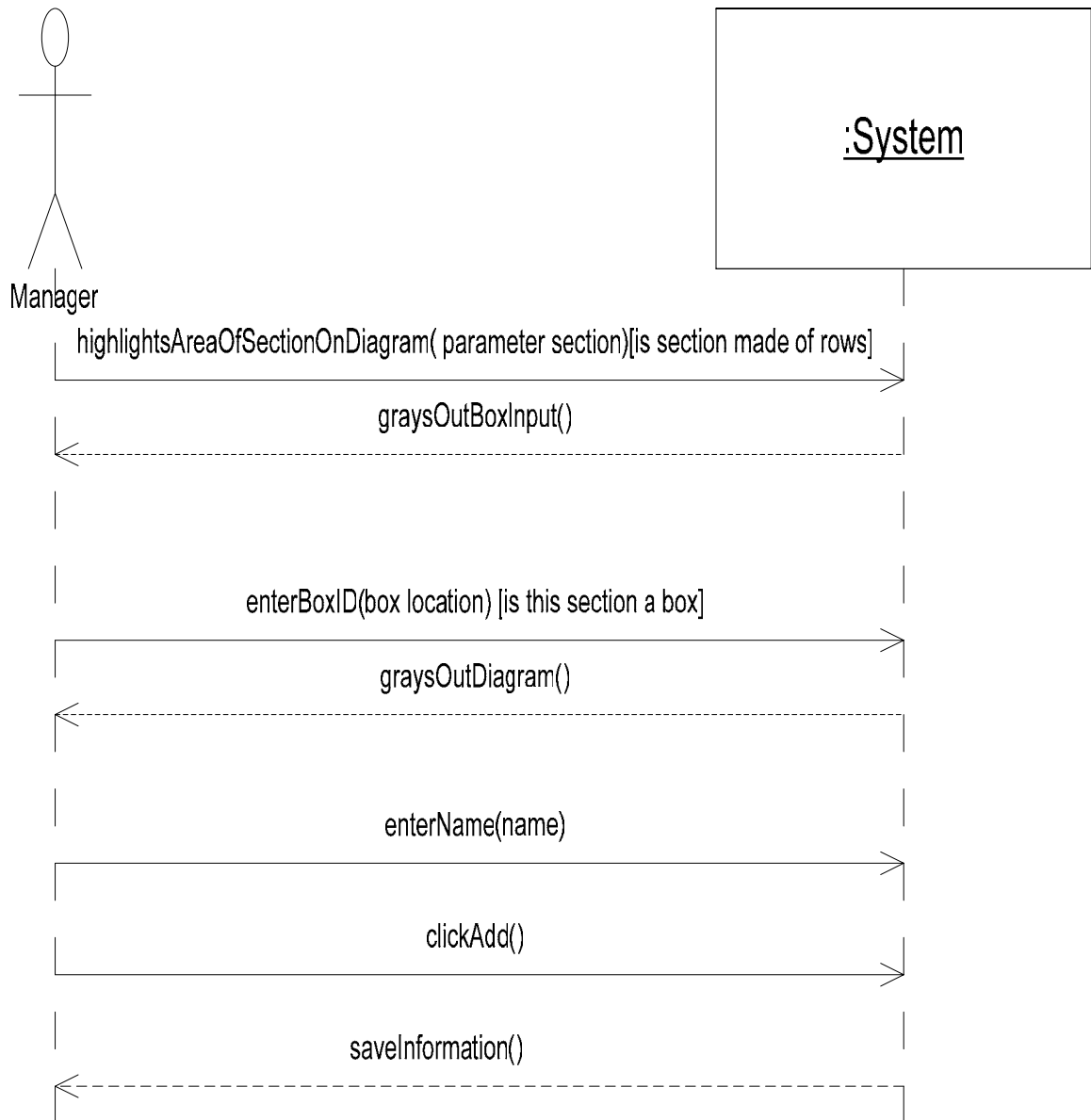
Adding New Section



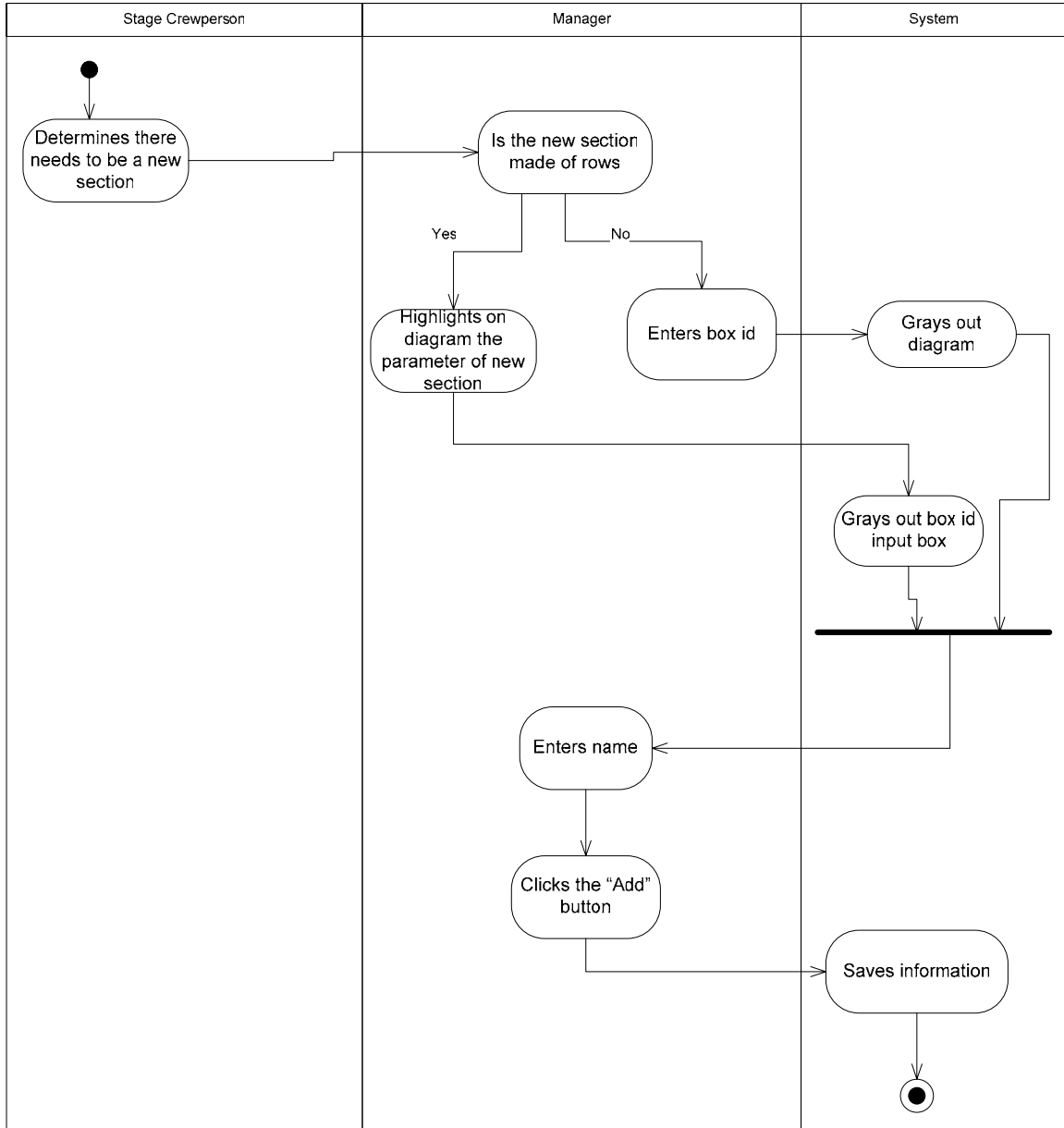
Use Case Description

Use Case Name:	Add a New Section	
Scenario:	Add a New Section	
Triggering Events:	For a specific seat configuration we need to create a new section.	
Brief Description:	The venue manager considers the seat configuration needed for a production and then selects what rows/boxes will be available and creates a section from this. When a section is decided upon the manager needs to add it to the system.	
Actors:	Stage Crewperson, Manager	
Related Use Cases:		
Stakeholders:	Stage Crewperson: decides what seats/rows/boxes will be available for a production Manager: provides information Clerk: offers seats available in that new section Customer: decides if wants to buy a seat in that section	
Preconditions:	Rows that make up a section or a box that is a section must exist.	
Postconditions:	A section must be created made up of either rows or a box.	
Flow of Events:	Actor	System
	<ol style="list-style-type: none"> 1. Stage Crewperson determines the seating configuration and if a new section needs to be added. 2. Manager clicks on picture representation of seat configuration and highlights new area of section 3. If section is going to be a box, manager selects box id. 4. Manager names the section. 5. Manager clicks the “Add” button. 	<p>2.1 If user selects a section from diagram, box input is grayed out.</p> <p>3.1 Once box id is identified diagram is grayed out.</p> <p>5.1 Stores all information.</p>
Exception Conditions:	5.2 If the data isn’t saved properly, the screen returns to back to the input screen and in red shows where new data needs to be added.	

System Sequence Diagram




Activity Diagram



Add New Event

Two Tickets Plus - Add New Event
_ □ ×



Venue

Delta Center
▾

Production

Utah Jazz - 2004 Season
▾

Event

Event name:

Bulls vs. Jazz – Game 1

Administration

Event Manager:

Jack Ryan
▾

Event Date & Time

June 05						
M	T	W	T	F	S	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

7
▾

:15
▾

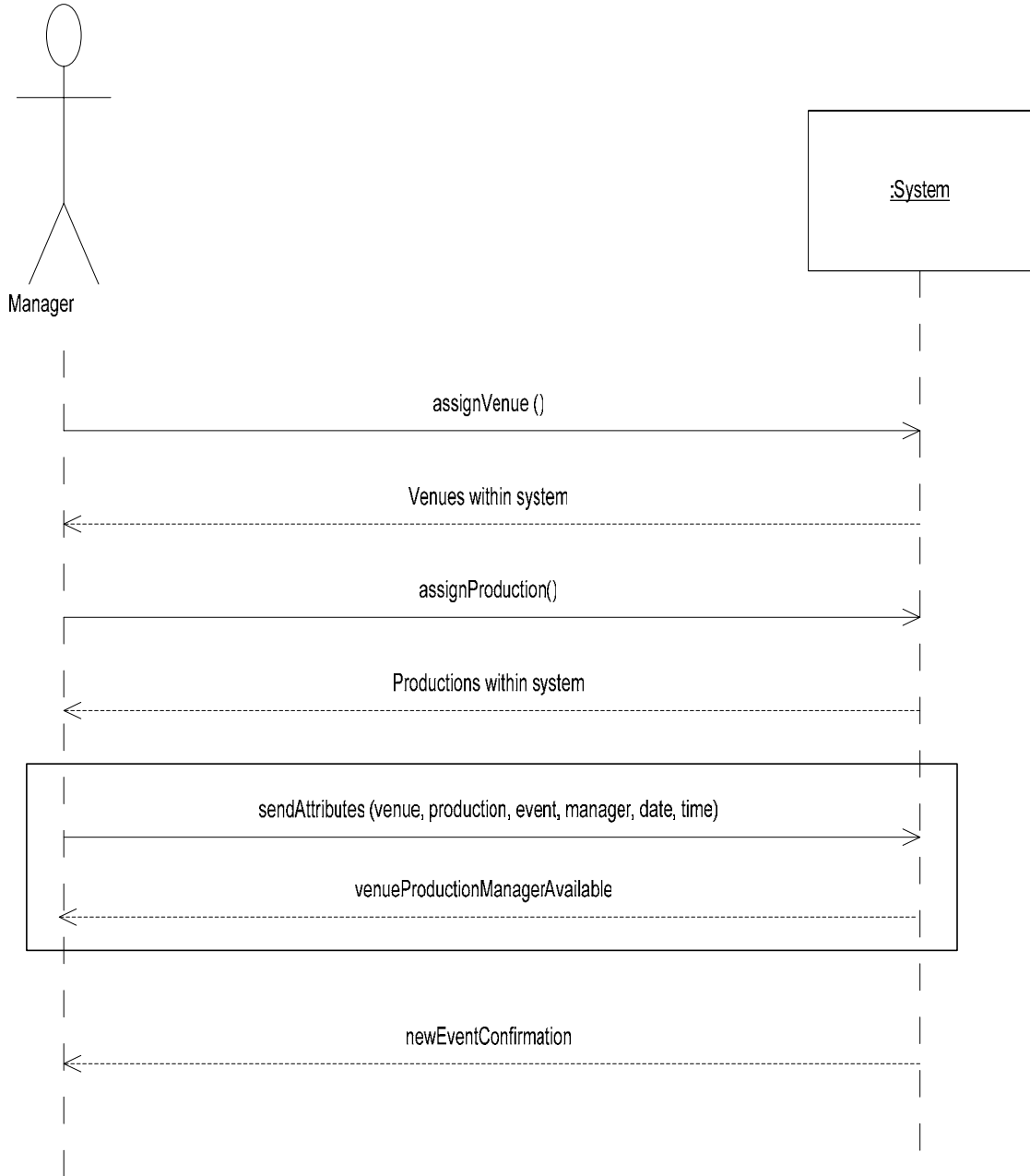
PM
▾

Adding New Event

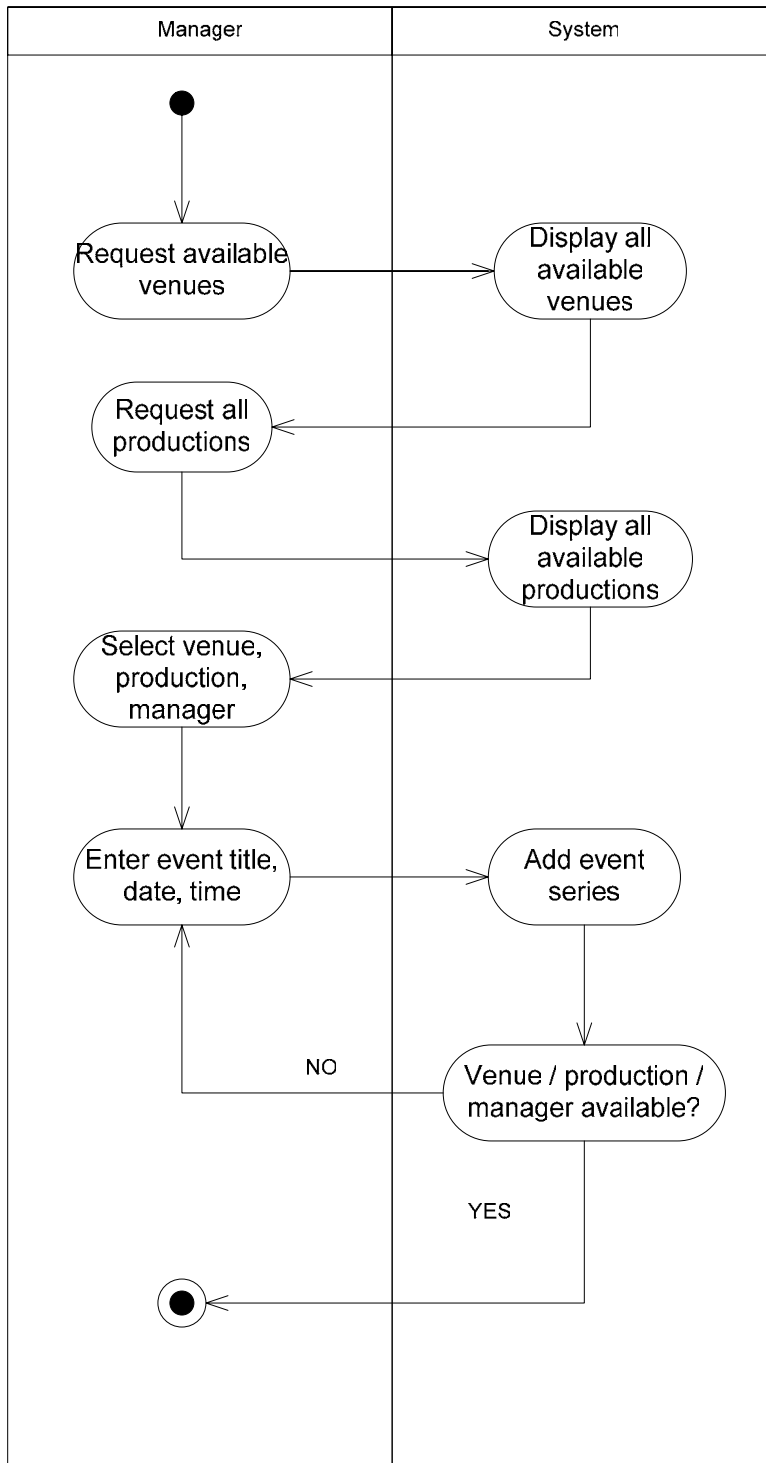
Use Case Description

Use Case Name:	Add a new event	
Scenario:	Add a new event to system	
Triggering Events:	Production manager needs to add event to venue based on schedule	
Brief Description:	The production manager chooses which events will make up the production run. The production manager associates the production to a venue and chooses dates for the specific events.	
Actors:	Production manager	
Related Use Cases:	Includes:	
Stakeholders:	Sales Department Marketing Department Production Department	
Preconditions:	Venues must exist in database Productions must exist in database	
Postconditions:	Event must be given a unique name Even must be assigned date/time	
Flow of Events:	Actor	System
	1. Manager requests all available venues	1.1 Display all available venues
	2. Manager requests all available venues	2.1 Display all available venues
	3. Manager enters venue, events, manager, name, and pricing information	3.1 Check validity of all attributes 3.2 Process new event series
Exception Conditions:	3.1 Event name contains unacceptable characters 3.1 Venue booked for date/time requested 3.1 Production booked for date/time requested	

System Sequence Diagram




Activity Diagram



Add New Event Series

Two Tickets Plus - Add New Event Series



Back to Main Menu

Reset Fields

Event
Series name: Playoffs - 1st round

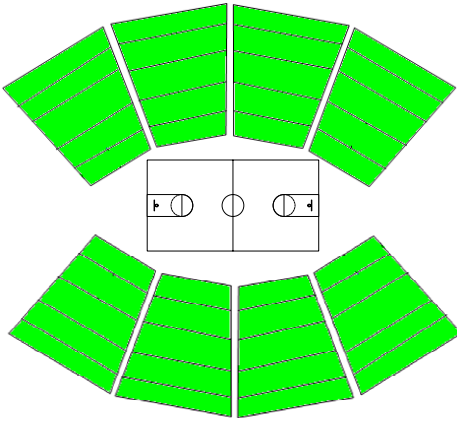
Production
Production: Utah Jazz - 2004 Season

Administration
Series Manager: Jack Welch

Available Events for Selected Production

- Bulls vs. Jazz (Jun. 21)
- Bulls vs. Jazz (Jun. 22)
- Bulls vs. Jazz (Jun. 26)*
- Bulls vs. Jazz (Jun. 27)*

* If game necessary




Assign Price Categories

Front Row	\$1895
Courtside	\$1095
Value	\$1695

Add Cancel

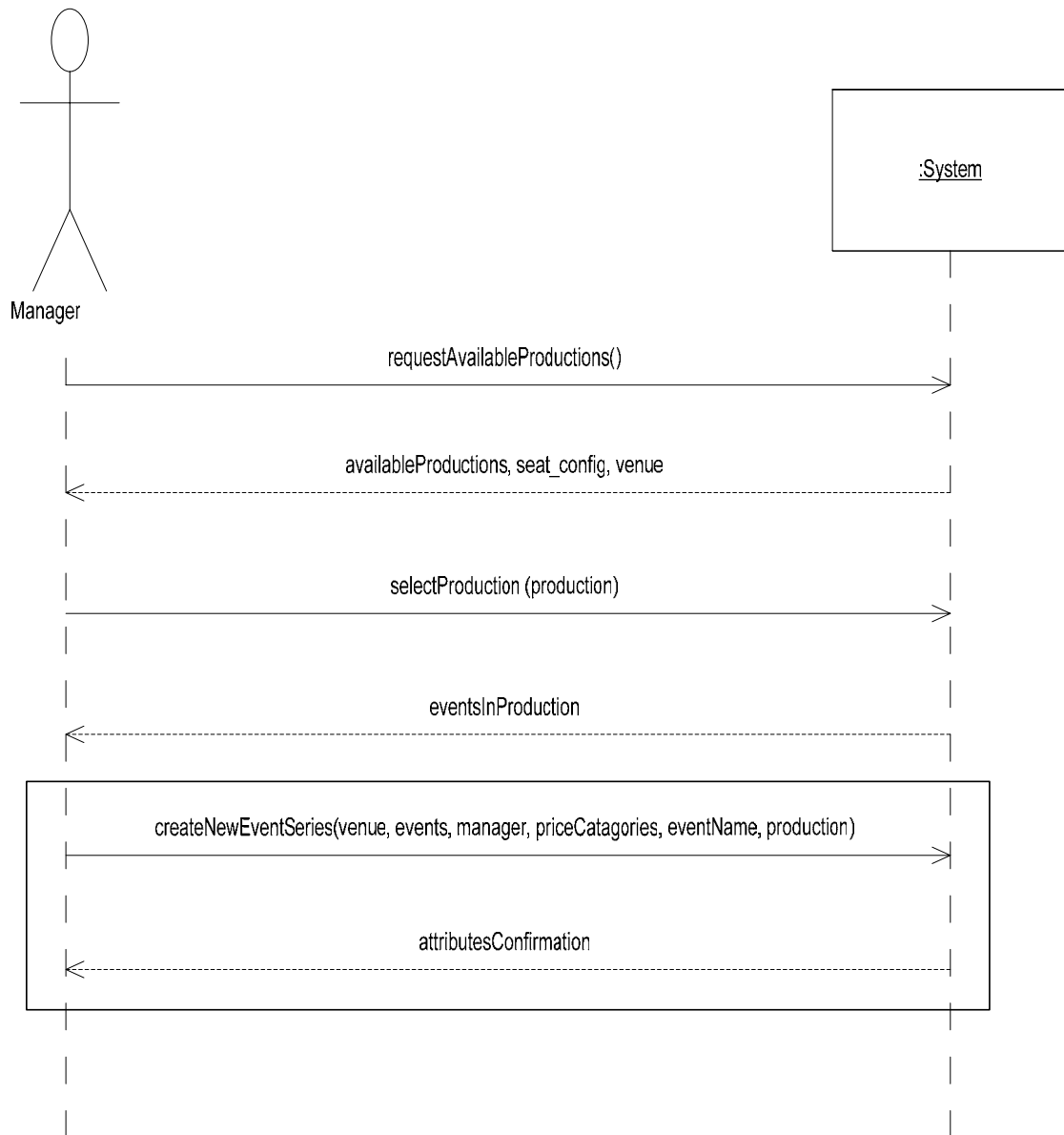
Adding New Event Series



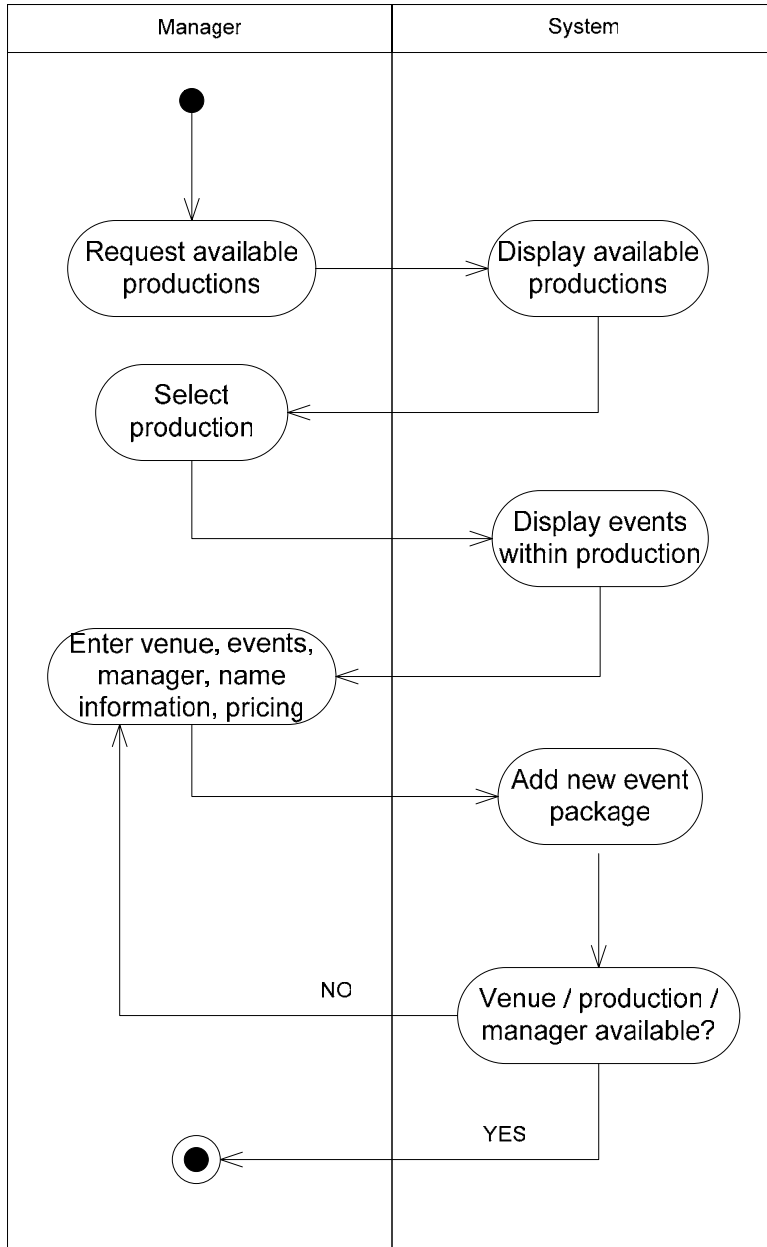
Use Case Description

Use Case Name:	Add a new event series	
Scenario:	Add a new event series to system	
Triggering Events:	Manager needs to add event series based on current sales or new event to venue	
Brief Description:	Manager decides on a series to offer. The manager creates a new series and adds the events, type of series, discount, and cost.	
Actors:	Venue manager	
Related Use Cases:	Includes:	
Stakeholders:	Sales Department Marketing Department Production Department	
Preconditions:	Production must exist Venues must exist and be assigned to production Seating configurations must exist	
Postconditions:	Events must be assigned to series Series (including sections and rows must now be available for sale)	
Flow of Events:	Actor	System
	1. Manager requests all available productions	1.1 Display all available productions
	2. Manager selects production	2.1 Display all events within production
	3. Manager enters venue, events, manager, name, and pricing information	3.1 Check validity of all attributes 3.2 Process new event series
Exception Conditions:	3.1 Information requested by user not found or not available 3.1 Desired attributes outside of acceptable ranges	

System Sequence Diagram




Activity Diagram



Add New Pricing Scheme

Two Tickets Plus - Add New Pricing Scheme



Back to Main Menu

Reset Fields

Enter in Name of Pricing Scheme:

Ground Floor

Select Destination for Pricing Scheme:

Production
Phantom

Event
TUES, Nov. 24, 2004 7:00 PM

Section
A

Row
25

Go

Go

Go

Go

Add

Cancel

Enter in Price to be Associated With Above Location

10.00

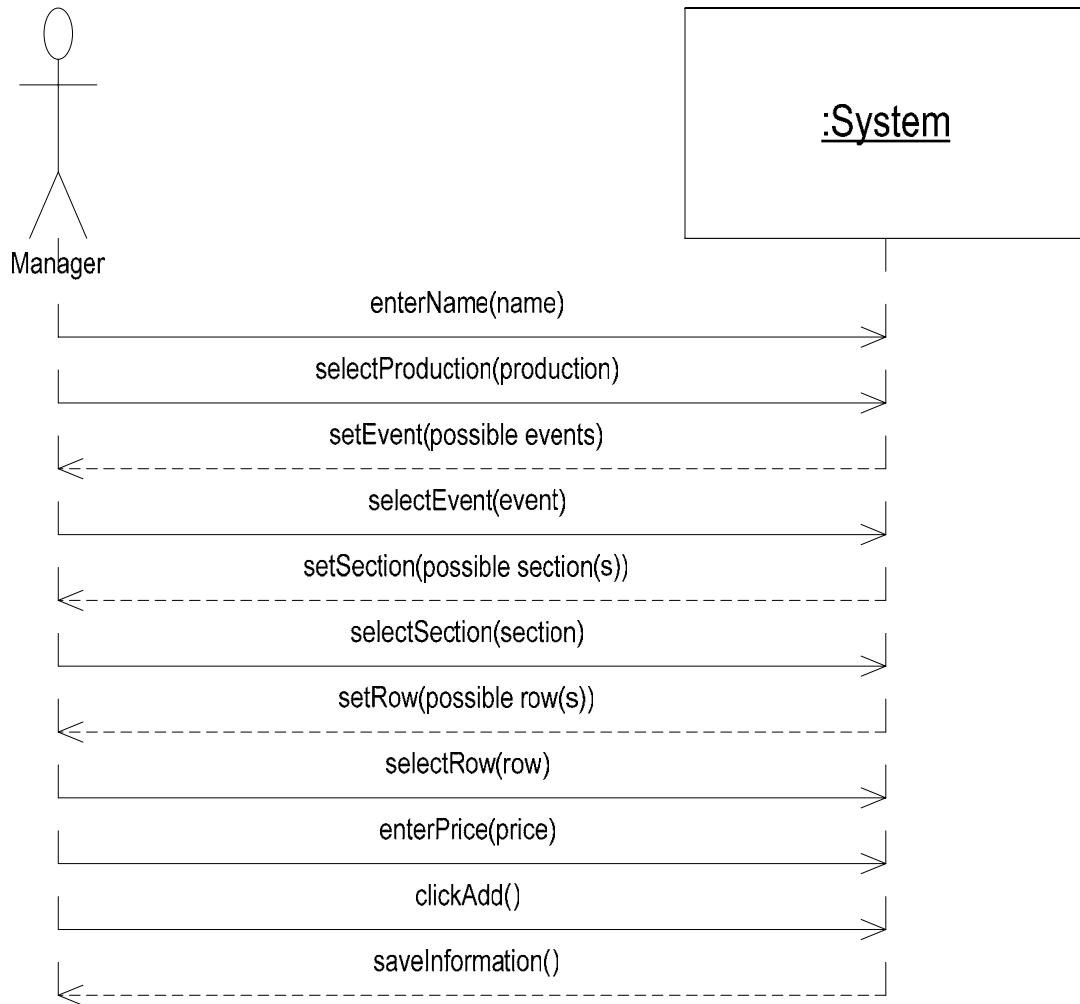
Adding New Pricing Scheme

Progress bar: 100%

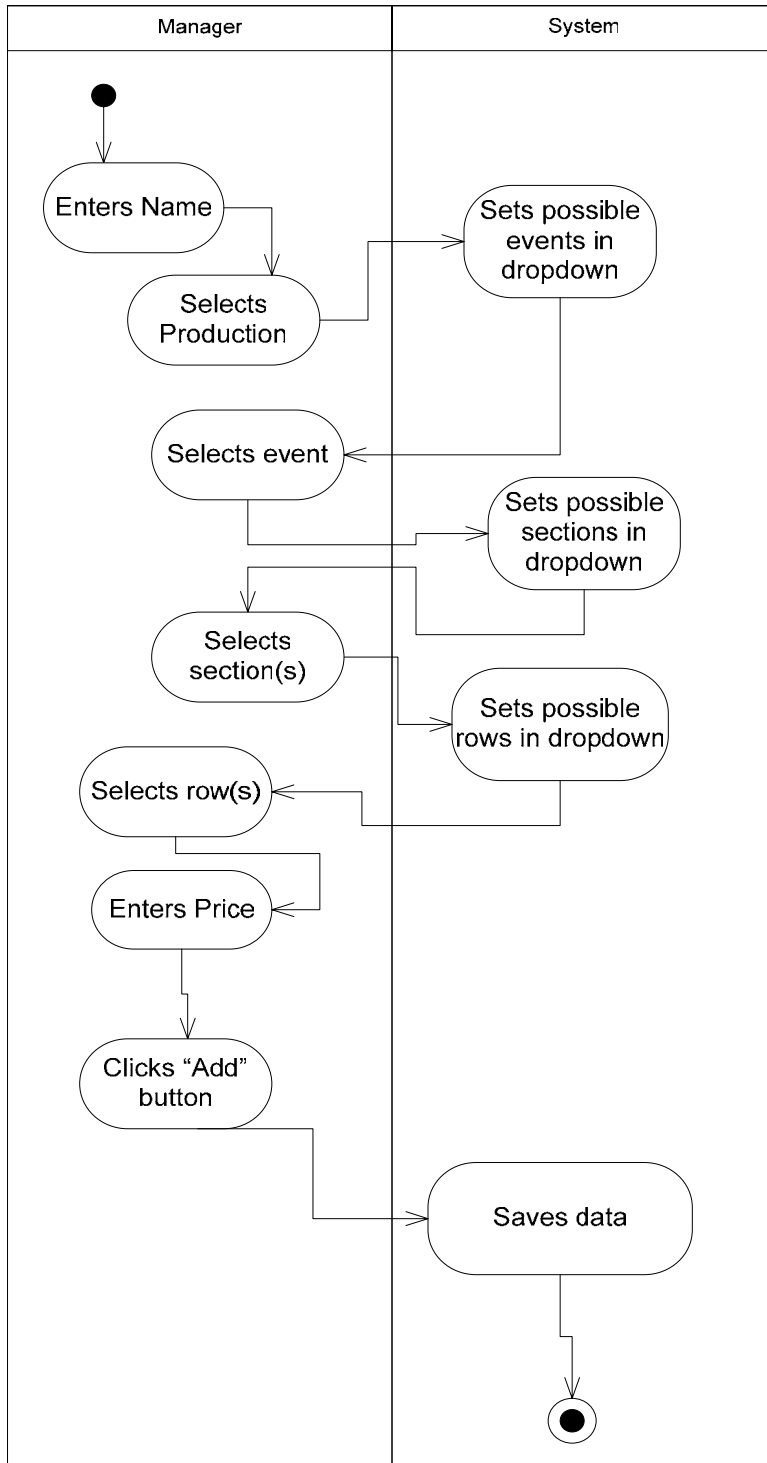
Use Case Description

Use Case Name:	Add new pricing scheme																			
Scenario:	Add new pricing scheme																			
Triggering Events:	Manager decides there needs to be a new pricing scheme.																			
Brief Description:	The manager considers the seat configuration needed for a production and then selects pricing schemes for each general area, for example: nosebleed, front row, bowl, balcony, value, and obstructed view. When a new pricing scheme is decided upon the manager needs to add it to the system.																			
Actors:	Manager, Clerk																			
Related Use Cases:																				
Stakeholders:	Managers: to provide information Clerks: to explain price differences to outsiders Customers: to verify if want to buy ticket in that scheme																			
Preconditions:	A location must exist.																			
Postconditions:	Destinations with particular prices will be created.																			
Flow of Events:	<table border="1"> <thead> <tr> <th>Actor</th> <th>System</th> </tr> </thead> <tbody> <tr> <td>1. Manager decides there needs to be a new pricing scheme.</td> <td></td> </tr> <tr> <td>2. Manager enters name for the pricing scheme.</td> <td></td> </tr> <tr> <td>3. Manger selects production.</td> <td>3.1 Event possibilities set in event dropdown.</td> </tr> <tr> <td>4. Manager selects event.</td> <td>4.1 Section dropdown set.</td> </tr> <tr> <td>5. Manager selects section.</td> <td>5.1 Row dropdown set.</td> </tr> <tr> <td>6. Manager selects row.</td> <td></td> </tr> <tr> <td>7. Manager enters a price.</td> <td></td> </tr> <tr> <td>8. Manger clicks "Add" button to save data.</td> <td>8.1 All information added.</td> </tr> </tbody> </table>	Actor	System	1. Manager decides there needs to be a new pricing scheme.		2. Manager enters name for the pricing scheme.		3. Manger selects production.	3.1 Event possibilities set in event dropdown.	4. Manager selects event.	4.1 Section dropdown set.	5. Manager selects section.	5.1 Row dropdown set.	6. Manager selects row.		7. Manager enters a price.		8. Manger clicks "Add" button to save data.	8.1 All information added.	
Actor	System																			
1. Manager decides there needs to be a new pricing scheme.																				
2. Manager enters name for the pricing scheme.																				
3. Manger selects production.	3.1 Event possibilities set in event dropdown.																			
4. Manager selects event.	4.1 Section dropdown set.																			
5. Manager selects section.	5.1 Row dropdown set.																			
6. Manager selects row.																				
7. Manager enters a price.																				
8. Manger clicks "Add" button to save data.	8.1 All information added.																			
Exception Conditions:	<p>3.2 If there isn't a possible set for event, then all possibilities are shown.</p> <p>8.2 If the data isn't saved properly, the screen returns to back to the input screen and in red shows where new data needs to be added.</p>																			

System Sequence Diagram




Activity Diagram



Customer

Add New Customer

Two Tickets Plus - Add New Customer



Back to Main Menu

Reset Fields

Name

Matt Thomas

Address

342 E. 200 N. #5

City

Provo

State

Utah


Phone #

(123) 456-7890

Add

Cancel

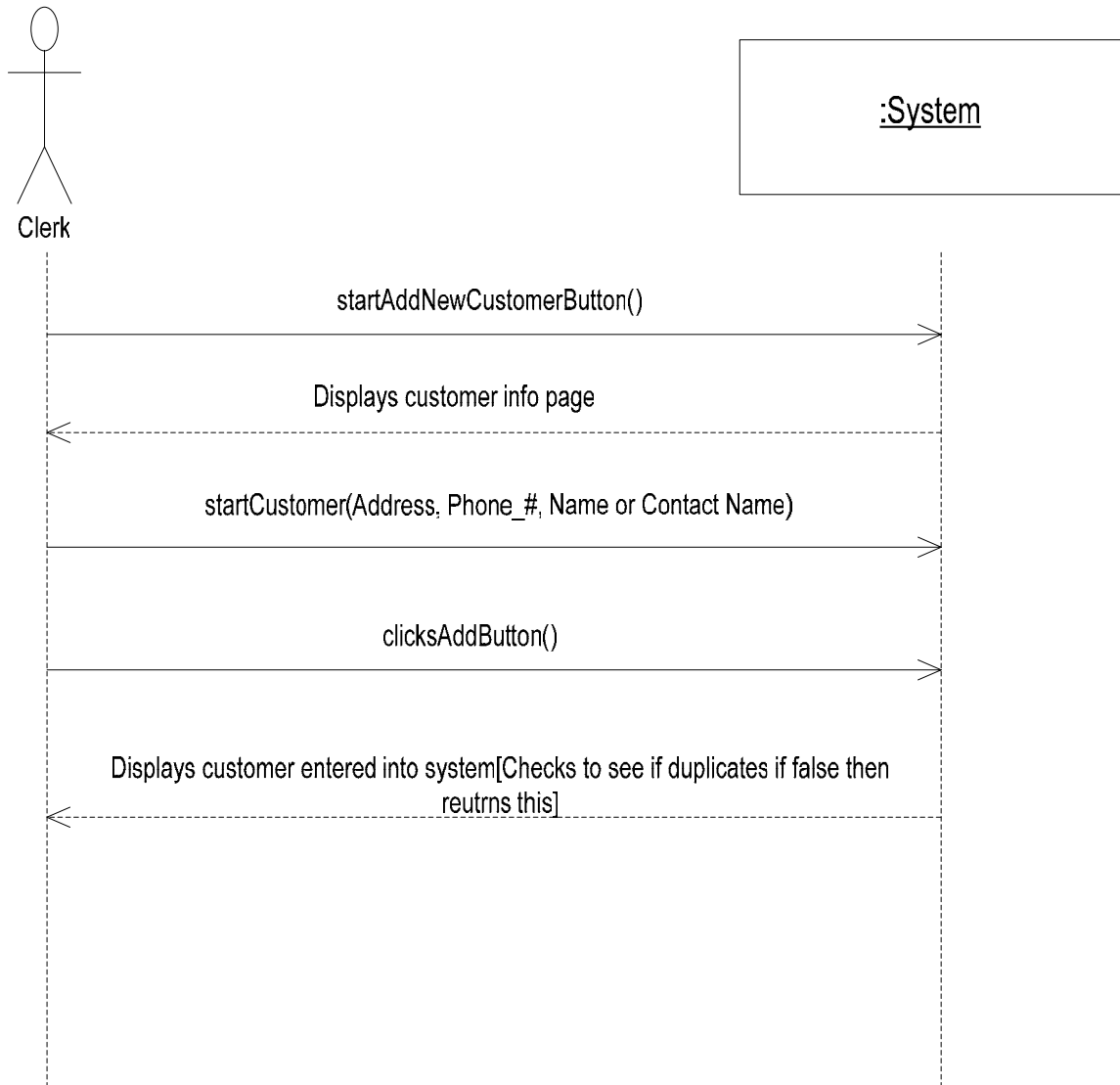
Adding New Customer



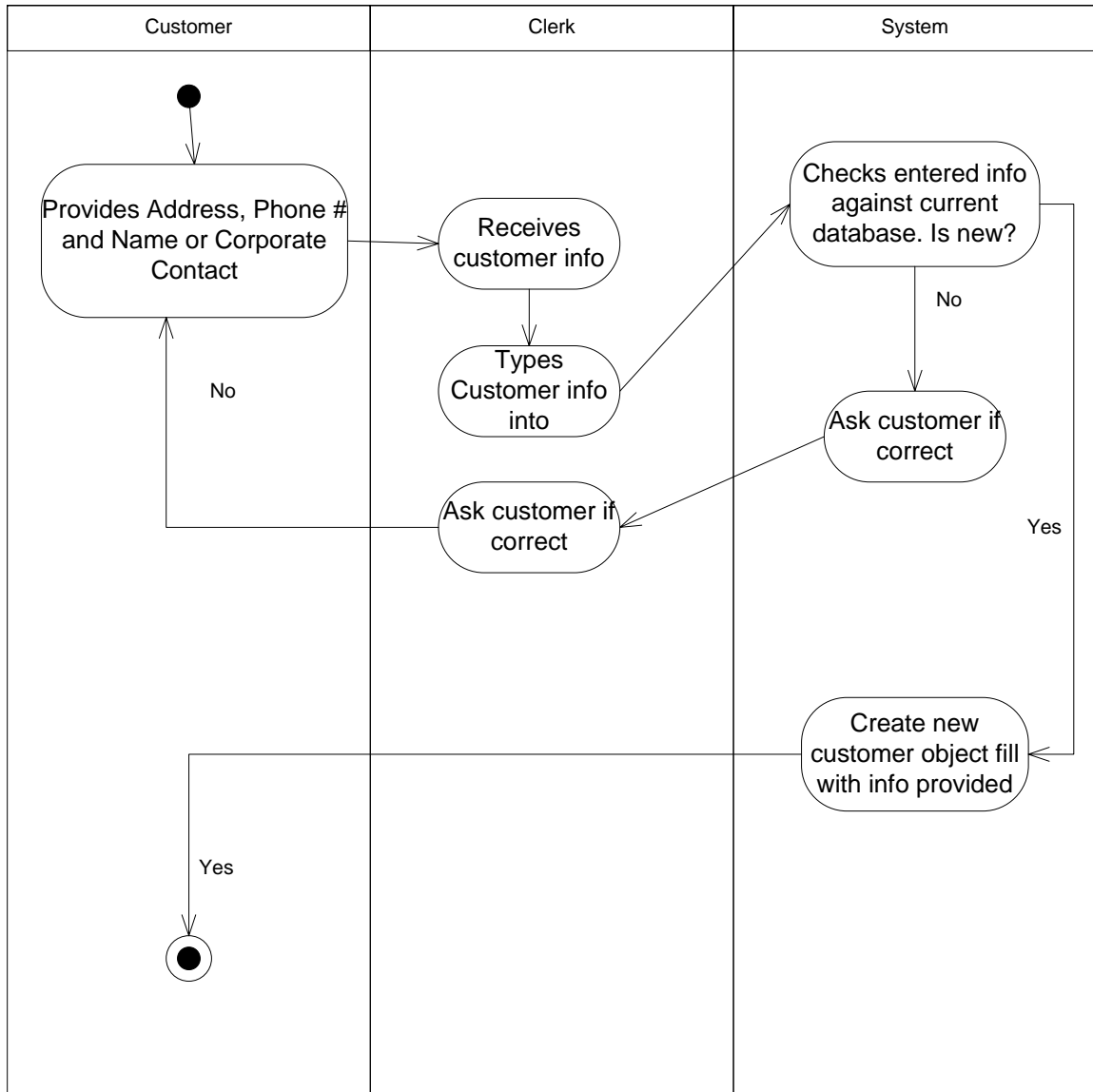
Use Case Description

Use Case Name:	Add Customer Information	
Scenario:	Add Customer Information	
Triggering Events:	Clerk requests	
Brief Description:	This adds the customer information into the system so that the customer can purchase a ticket. The clerk enters it all into the system which after clicking submit checks it against the database to see if the customer is already there. If not it creates new customer with the information provided. Then finishes adding the customer so that they can purchase tickets or a package	
Actors:	Clerk	
Related Use Cases:	Purchase Tickets for an Event, Purchase Series	
Stakeholders:	Customer: needs personal info in system to purchase a ticket Manager: need this info to mail out specials to customers Clerk: wants to help customer be able to purchase a ticket	
Preconditions:	The add new customer button must exist on the screen	
Postconditions:	Customer must be one of the following: created or updated or selected	
Flow of Events:	Actor	System
	<ol style="list-style-type: none"> 1. Clicks Add New Customer button 2. Enters customer address, phone #, name (if individual or contact name (if corporation) 3. Clicks add button 4. Tells customer they have been added 	<ol style="list-style-type: none"> 1.1 Displays customer info page 3.1 Checks the customer info against database and then creates new customer 3.2 Displays customer has been entered in
Exception Conditions:	<ol style="list-style-type: none"> 3.2 Duplicate Record Found <ol style="list-style-type: none"> a. Displays record already found ask customer if correct <ol style="list-style-type: none"> 1. If correct proceeds with sale 2. If not asks customer for new info and updates the record 4.1 If it is not correct clerk goes back to 3.2.a.2 and changes it 	

System Sequence Diagram




Activity Diagram



Purchase

Purchase Ticket

Two Tickets Plus - Purchase Ticket



Back to Main Menu
Reset Fields
Add New Customer

Select an Event

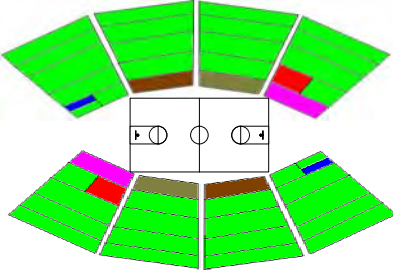
Venues Go

Productions Go

Events Go

Available seat in area clicked on

- Sect 45 Row 16 Seat 17
- Sect 45 Row 16 Seat 18
- Sect 45 Row 16 Seat 20



Available
 Other Colors Sections Taken

Tickets

Adults

Children (under 13)

Seniors (over 65)

Payment

Credit card
 Debit card
 Check
 Cash
 PayPal

Credit Card type

VISA
 MASTERCARD
 AMEX
 DISCOVER

Purchase Info

Discount

Billing Information

Credit card number

Expiration month and year


First name

Last name

Street Address

City and State

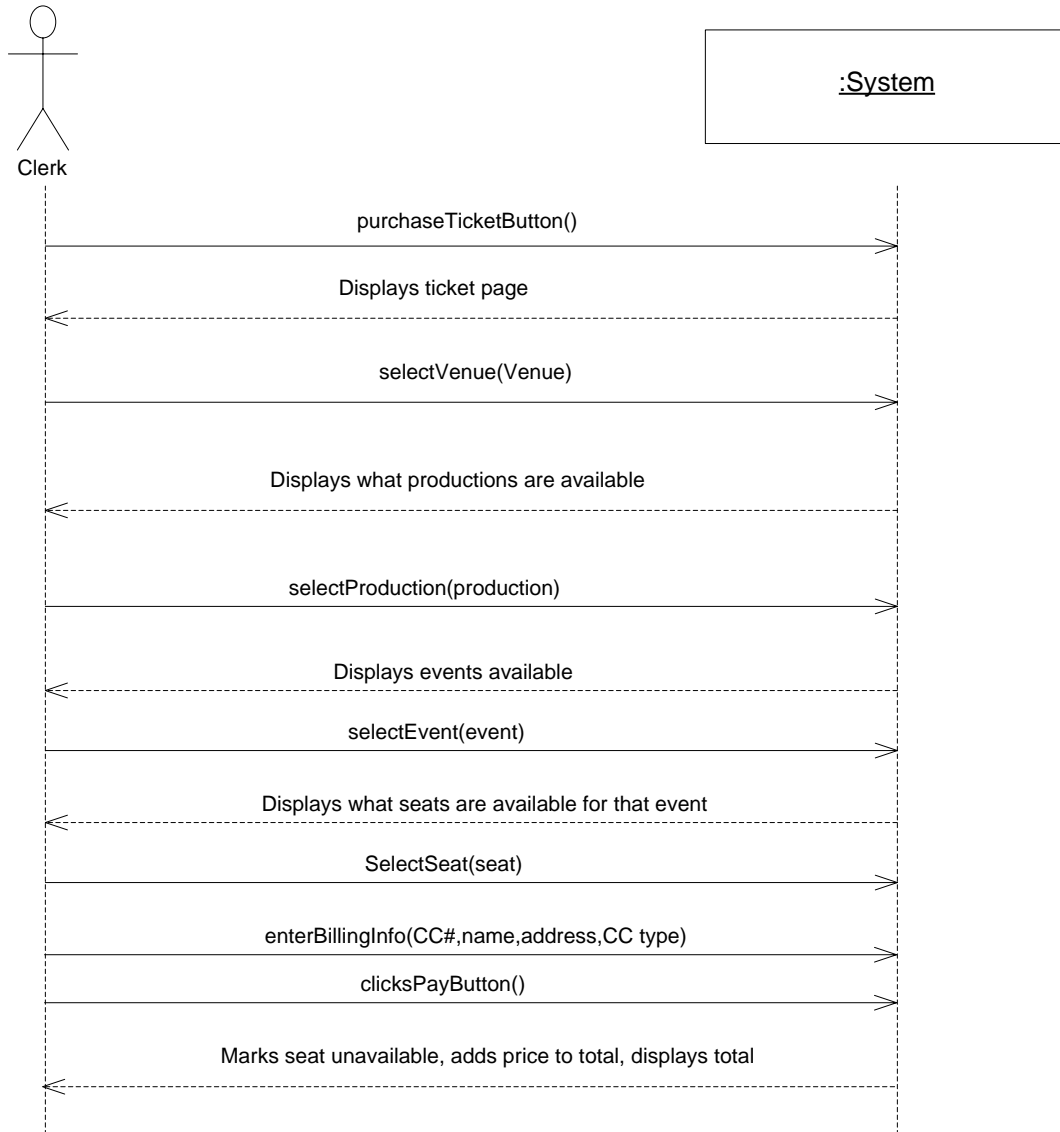
Pay Cancel

Purchasing Ticket 

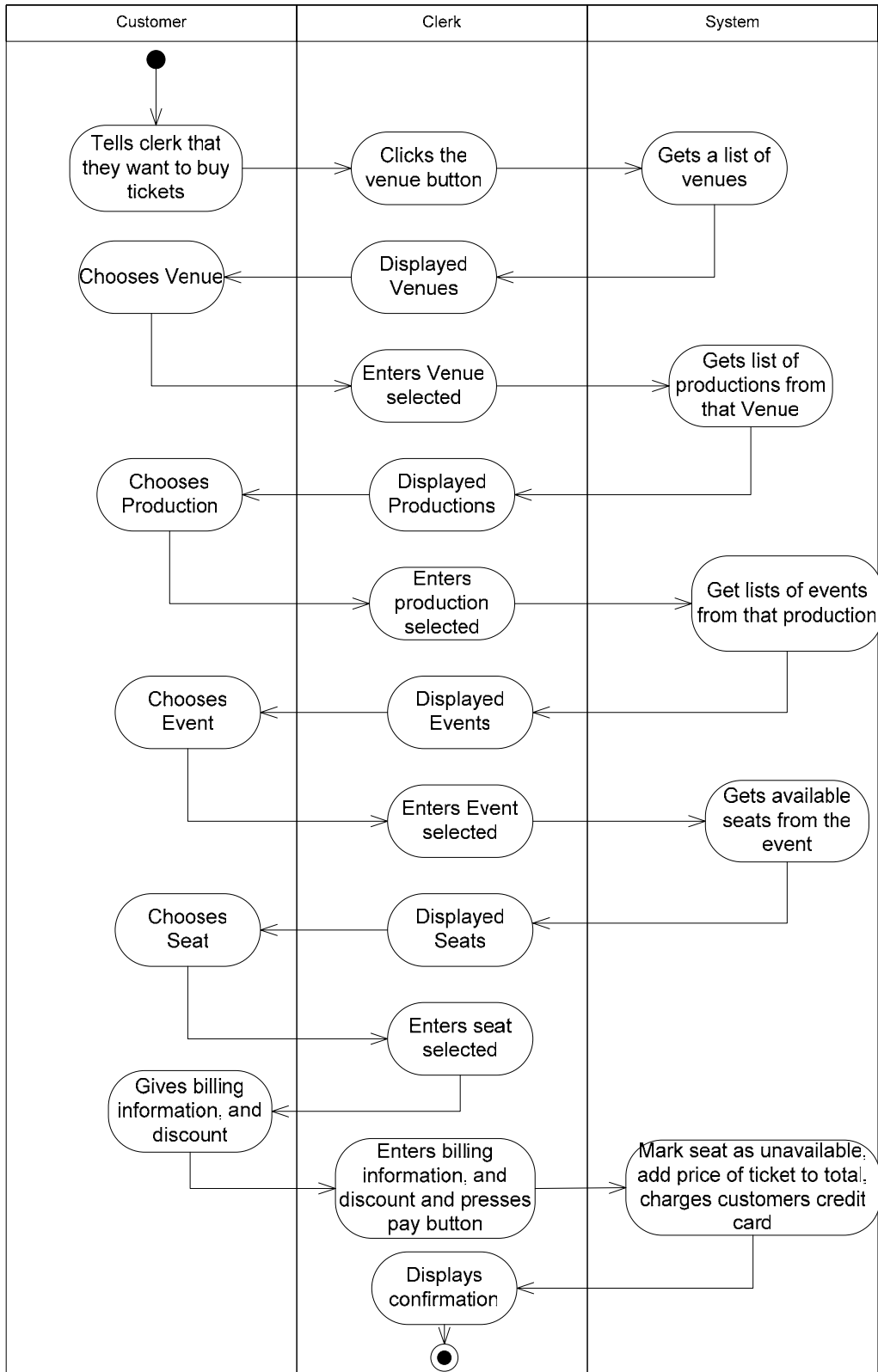
Use Case Description

Use Case Name:	Purchasing tickets for an event																											
Scenario:	Clerk purchasing tickets for an event on behalf of customer																											
Triggering Events:	Add Customer Info case																											
Brief Description:	In purchasing a ticket a venue has to be selected																											
Actors:	Clerk																											
Related Use Cases:	Add Customer Information																											
Stakeholders:	Customer: wants to purchase tickets to an event Clerk: wants to sell tickets to an event																											
Preconditions:	Customer must exist. Venues, production, and events all must exist. There also must be a certain configuration layout for that production. All the section, rows and individual seats must exist.																											
Postconditions:	Seat marked as unavailable for a particular event Ticket printed for customer																											
Flow of Events:	<table border="1"> <thead> <tr> <th>Actor</th> <th>System</th> </tr> </thead> <tbody> <tr> <td>1. Selects the purchase ticket button</td> <td>1.1 Displays what ticket page</td> </tr> <tr> <td>2. Selects which venue desired</td> <td>2.1 Displays what productions are available at that venue</td> </tr> <tr> <td>3. Selects which production desired</td> <td>3.1 Displays what events are in that production</td> </tr> <tr> <td>4. Select which event desired</td> <td>4.1 Checks what seats are available for that event</td> </tr> <tr> <td>5. Select seat</td> <td>4.2 Displays what seats are available</td> </tr> <tr> <td></td> <td>5.1 Marks seat as unavailable</td> </tr> <tr> <td></td> <td>5.2 Adds price of ticket to total amount</td> </tr> <tr> <td></td> <td>5.3 Displays total</td> </tr> <tr> <td>6. Enters number of tickets to be bought</td> <td>7.1 Drop down with types of discounts for this event</td> </tr> <tr> <td>7. Enters a discount if available</td> <td></td> </tr> <tr> <td>8. Enters all billing information and payment type</td> <td></td> </tr> <tr> <td>9. Clicks pay button</td> <td>9.1 Processes the credit card and displays confirmation number</td> </tr> </tbody> </table>	Actor	System	1. Selects the purchase ticket button	1.1 Displays what ticket page	2. Selects which venue desired	2.1 Displays what productions are available at that venue	3. Selects which production desired	3.1 Displays what events are in that production	4. Select which event desired	4.1 Checks what seats are available for that event	5. Select seat	4.2 Displays what seats are available		5.1 Marks seat as unavailable		5.2 Adds price of ticket to total amount		5.3 Displays total	6. Enters number of tickets to be bought	7.1 Drop down with types of discounts for this event	7. Enters a discount if available		8. Enters all billing information and payment type		9. Clicks pay button	9.1 Processes the credit card and displays confirmation number	
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7. Enters a discount if available																												
8. Enters all billing information and payment type																												
9. Clicks pay button	9.1 Processes the credit card and displays confirmation number																											
Exception Conditions:	4.1 Event sold out therefore they can not purchase tickets to that event 5.3 If more tickets are desired repeat all the steps																											

System Sequence Diagram




Activity Diagram



Purchase Series

Two Tickets Plus - Purchase Series



[Back to Main Menu](#)
[Reset Fields](#)

Your selection

Venue: **Delta Center - Jazz**
Package: **Opponent package**
Events:

- Lakers vs. Jazz (Nov. 19)
- Lakers vs. Jazz (Nov. 20)
- Lakers vs. Jazz (Dec. 19)
- Lakers vs. Jazz (Jan. 28)
- Lakers vs. Jazz (Feb. 15)
- Lakers vs. Jazz (Mar. 8)

Seats

Courtside - \$65

Choose from Front Row, Courtside, and Value tickets. TwoTicketsPlus guarantees best available seats in chosen price category.

Children and Seniors - \$10 off

Tickets

Adults: 2
Children (under 13): 3
Seniors (over 65): 2

Payment

Credit card
 Debit card
 Check
 Cash
 PayPal

Credit Card type

VISA
 MASTERCARD
 AMEX
 DISCOVER

Billing Information

Credit card number: 1234567899874567
Expiration month and year: April 2007
First name: John
Last name: Doe
Street Address: 1893 S. 30 W.
Apt. #21
City and State: Orem UT

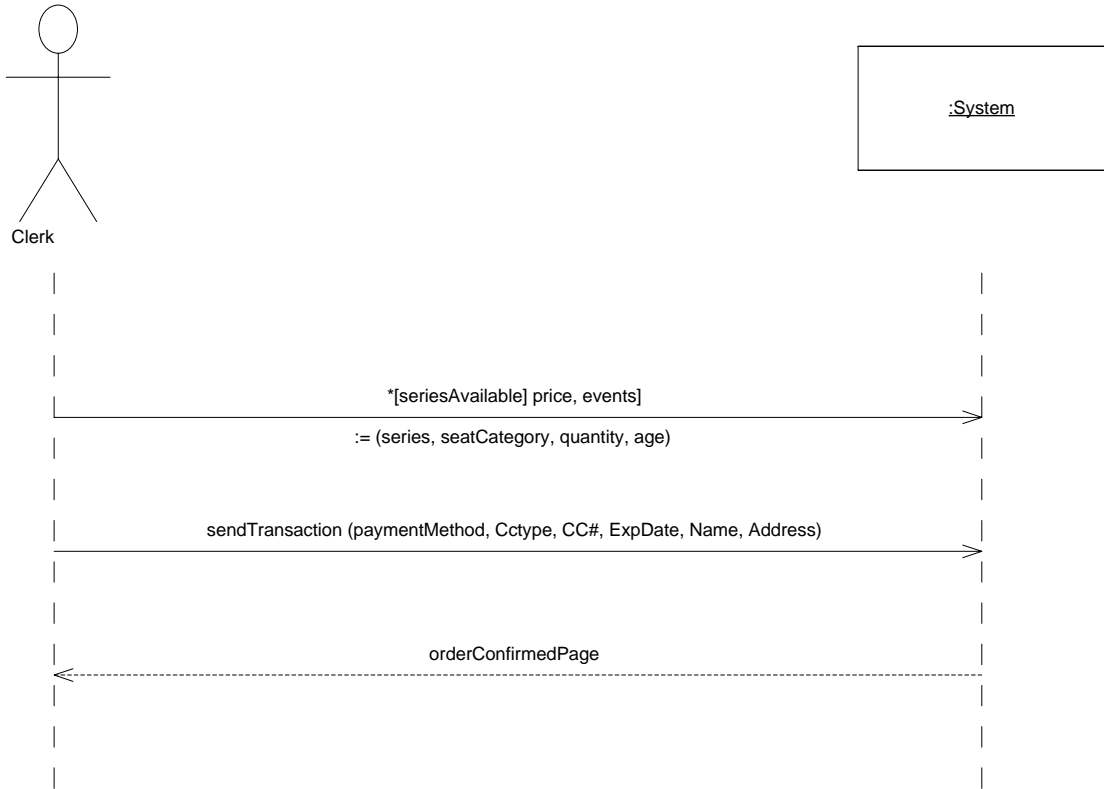
[Pay](#) [Cancel](#)

Purchasing Series

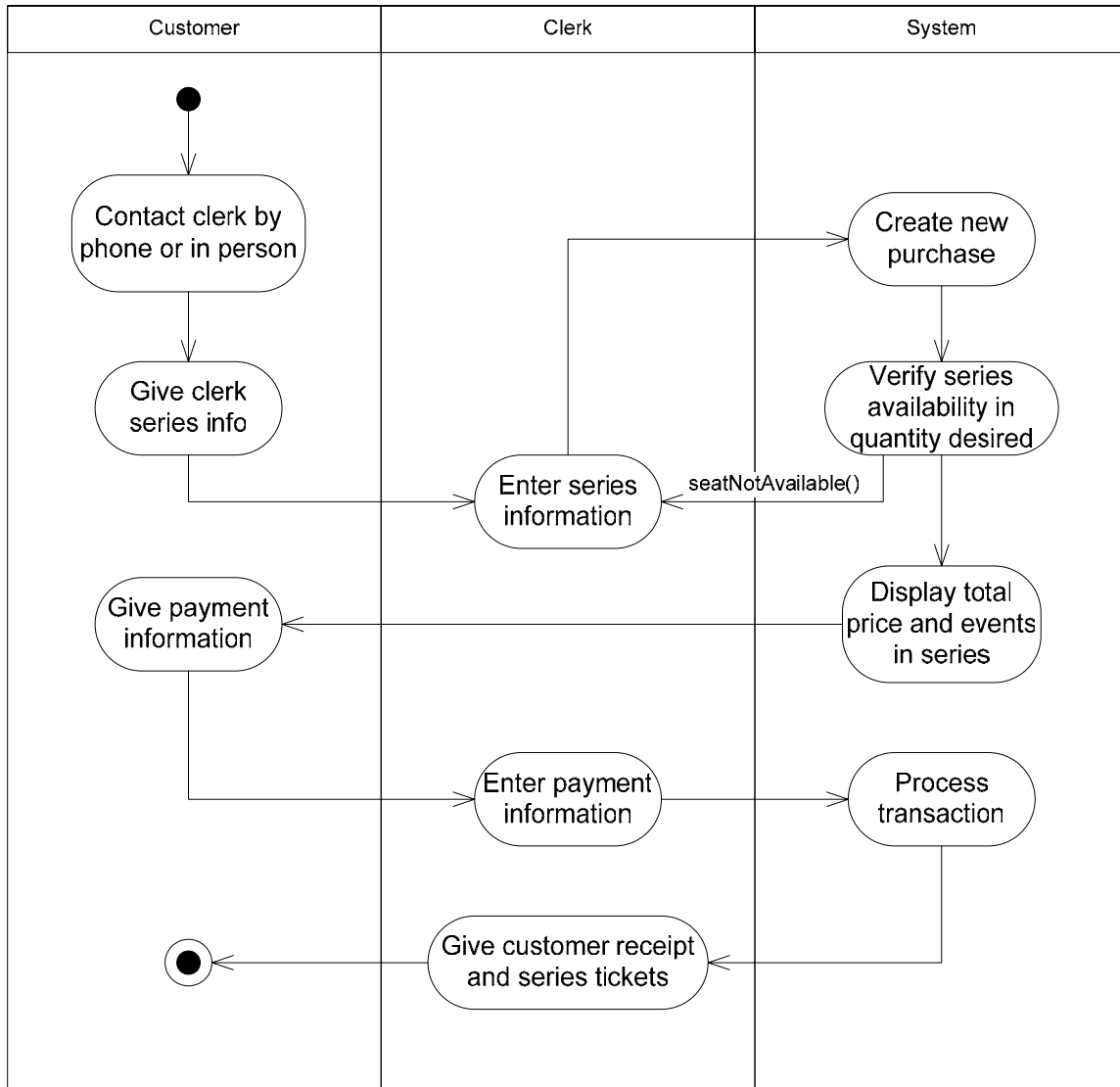
Use Case Description

Use Case Name:	Purchase a series	
Scenario:	Create a new series order	
Triggering Events:	Customer requests a series order at a venue	
Brief Description:	Customer requests series order; the clerk opens order, helps customer choose series, at which point the clerk collects the payment and processes the transaction.	
Actors:	Clerk	
Related Use Cases:	Includes: <i>Search for Available Seats</i>	
Stakeholders:	Sales Department	
Preconditions:	Venue must be available and assigned to production Production must be available in system Events must be assigned to venue and production Seating configurations must be entered for type of production Sales series be entered Payment must be received	
Postconditions:	Ticket must be created in system System must have received customer information Order must be associated with customer	
Flow of Events:	Actor	System
	1. Clerk requests a series on behalf of customer	1.1 Displays events within series
	2. Clerk requests price category on behalf of customer	2.1 Displays cost of seat in chosen price category
	3. Clerk requests quantity of tickets on behalf of customer	3.1 Displays total cost of tickets
	4. Clerk submits payment info on behalf of customer	4.1 Display order confirmation
Exception Conditions:	2.1 Series desired not available 4.1 Payment not accepted	

System Sequence Diagram




Activity Diagram



Availability

Search Available Seats

Two Tickets Plus - Search For Available Seat



Back to Main Menu

Reset Fields

Purchase Tickets

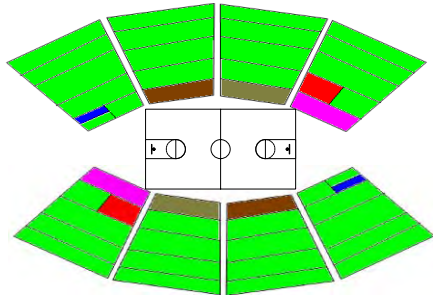
Select an Event

Venues

Productions

Events


Pricing Category



Available

Other Colors Sections Taken

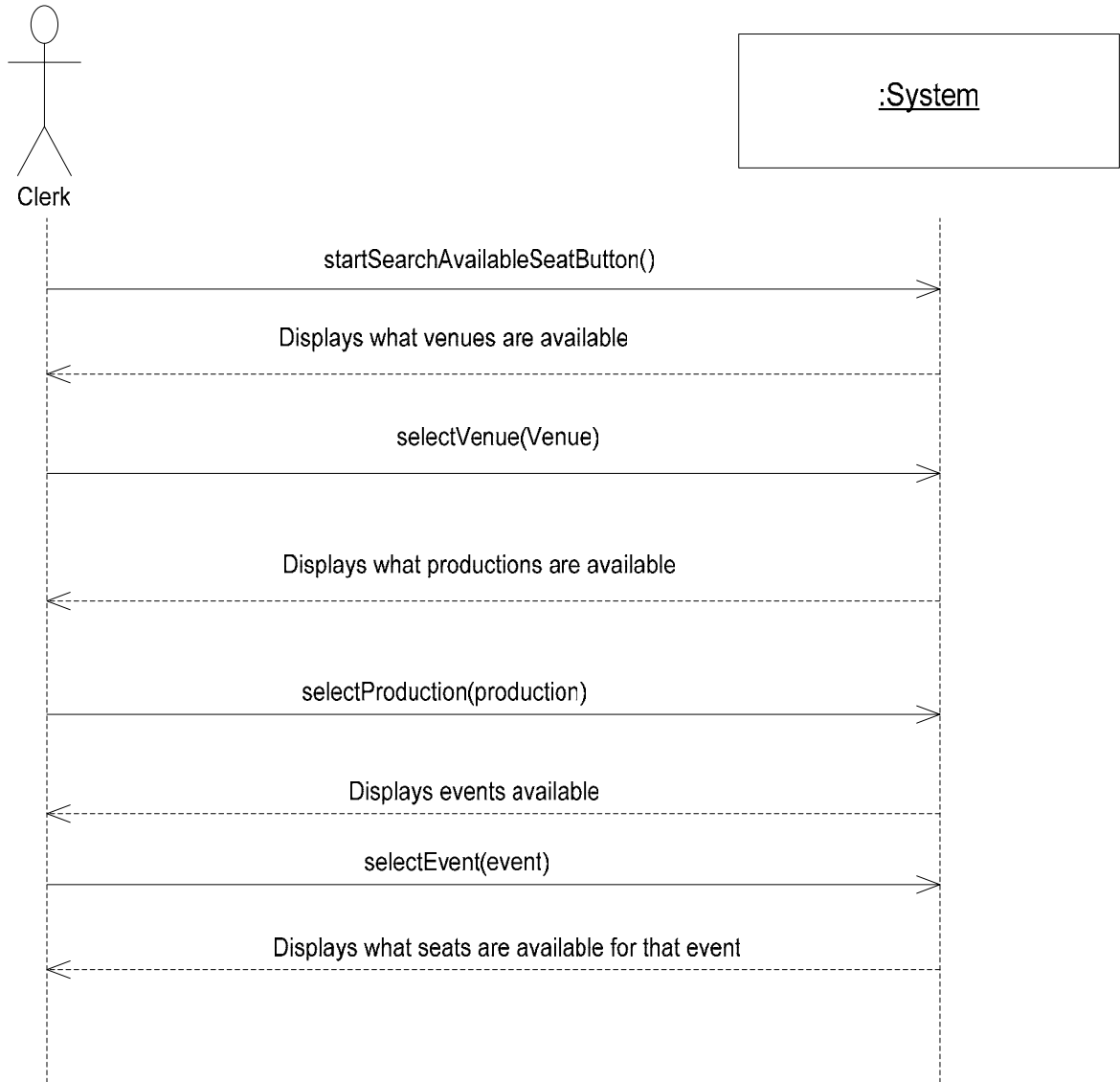
Searching for Available Seats



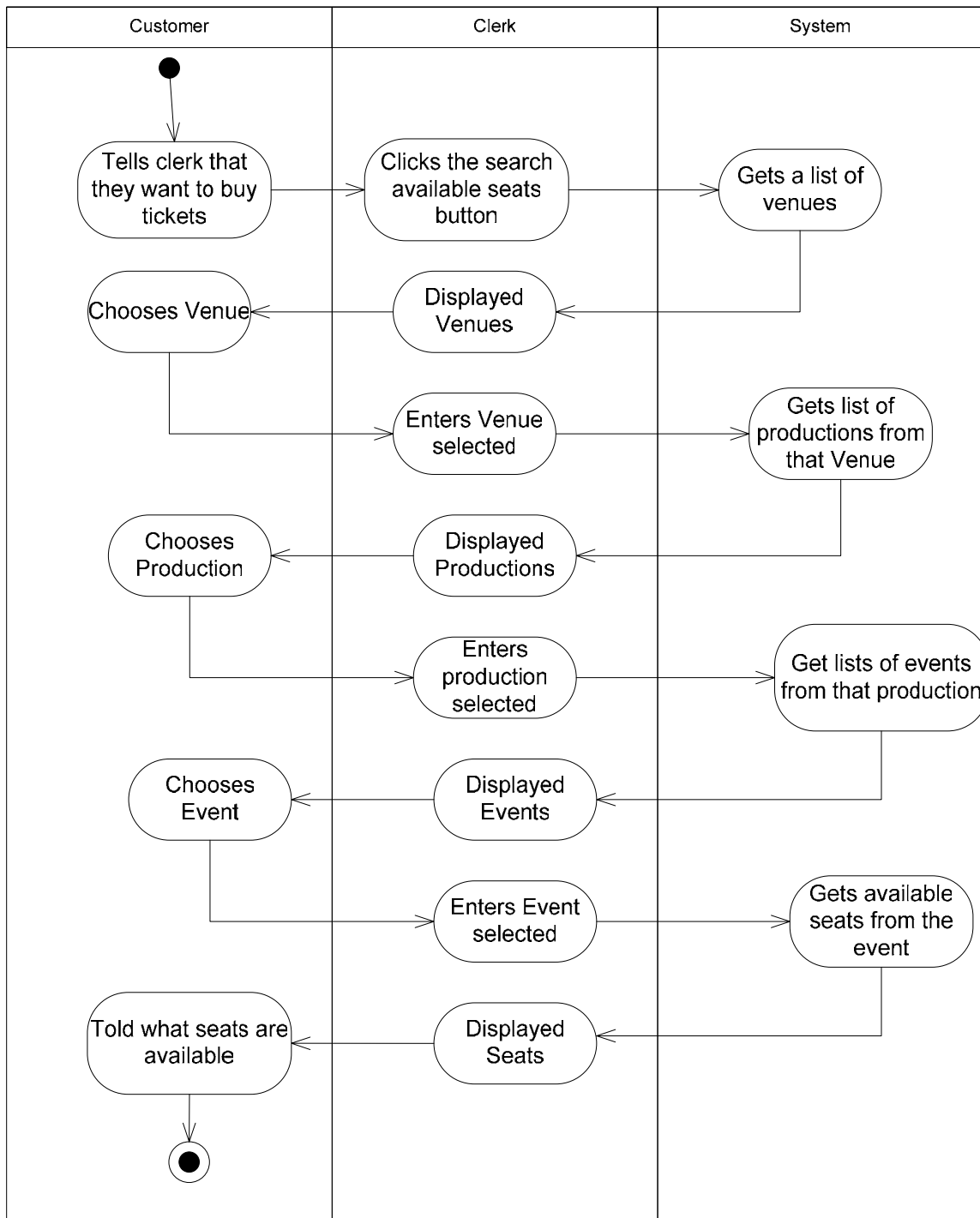
Use Case Description

Use Case Name:	Search for available seats	
Scenario:	Search for available seats	
Triggering Events:	Clerk requests	
Brief Description:	This case allows a clerk to look for available seats based on the venue that is selected, the production that is selected and the	
Actors:	Clerk	
Related Use Cases:	Add Customer Information, Purchase tickets, Purchase package	
Stakeholders:	Customer: to know what seats are available to purchase Clerk: to know which seat to sell Managers: to be able to slash prices based on # of available seats	
Preconditions:	Venues, production, and events all must exist. There also must be a certain configuration layout for that production. All the section, rows and individual seats must exist.	
Postconditions:	All the seats that are not sold have been displayed	
Flow of Events:	Actor	System
	<ol style="list-style-type: none"> 1. Selects the search available tickets button 2. Selects which venue desired 3. Selects which production desired 4. Select which event desired 	<ol style="list-style-type: none"> 1.1 Displays what availability page 2.1 Displays what productions are available at that venue 3.1 Displays what events are in that production 4.1 Checks what seats are available for that event 4.2 Displays what seats are available
Exception Conditions:	4.3 Event could be sold out in which nothing would be displayed	

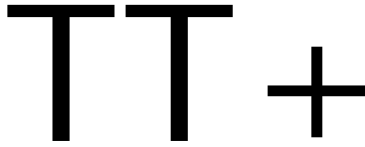
System Sequence Diagram



Activity Diagram



Reports and Recommendations



**EVENT SUMMARY FOR
NUTCRACKER EVENT**

TWO TICKETS PLUS

Report Produced:
DATE: 10/29/2004
TIME: 2 PM

Date of Event:
DATE: 10/10/2004
TIME: 7 PM

Potential Revenue	Revenue	Lost Revenue Due to Empty Seats	Lost Revenue Due to Discounts
\$9400	\$6340	\$2550	\$510

Example Drilldown:

*Potential Revenue
Play Seating Configuration
Nutcracker Event 10/10/2004 7pm*

Price Group	# Available Seats	# Seats Sold	Potential Revenue
\$10	100	70	\$1000
\$20	100	60	\$2000
\$30	50	35	\$1500
\$40	50	25	\$2000
\$50	20	20	\$1000
\$75	20	20	\$1500
\$200	2	2	\$400

TOTAL POTENTIAL REVENUE: \$9400



MONTHLY REVENUE REPORT

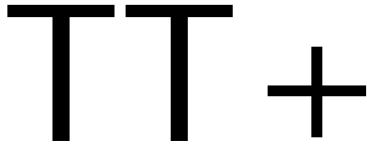
TWO TICKETS PLUS

Report Produced:

DATE: 1/10/2005

TIME: 3 PM

Production	Venue	Event	Revenue	Total	Commission
Nutcracker	Home	12/3/2004	\$6,300		
		12/15/2004	\$7,700		
		12/16/2004	\$7,900		
		12/17/2004	\$8,200		
				\$30,100	
Play Ball	South Park	7/29/2004	\$390		
		8/2/2004	\$655		
		10/9/2004	\$344		
		11/1/2004	\$700		
				\$2,089	\$42
Romeo and Juliet	Home	6/2/2004	\$7,400		
		6/13/2004	\$8,300		
		7/1/2004	\$7,500		
		8/29/2004	\$8,800		
		8/30/2004	\$9,150		
				\$41,150	
High School Basketball	West Side	1/22/2004	\$698		
		1/29/2004	\$894		
				\$1,592	\$32
Month Total				\$74,931	\$74



VENUE INVOICE

TWO TICKETS PLUS

Client:
Katie Preston (Movies 8)
1077 East Millstream Way
Bountiful, UT 84010

INVOICE:	256
DATE:	NOVEMBER 15, 2004
AMOUNT DUE:	\$2,078.00
ACCOUNT#:	7787354

DATE	DESCRIPTION	AMOUNT
11/04/04	HIGH SCHOOL BASKET BALL SALES RATE (3%)	\$800.00
11/08/04	HIGH SCHOOL BASKET BALL SALES RATE (3%)	\$500.00
11/11/04	PLAY BALL SALES (4%)	\$50.00
11/14/04	HIGH SCHOOL BASKET BALL SALES RATE (3%)	\$728.00
TOTAL:		\$2,078.00

Please attach check to top portion of statement. Payment is due within ten days of receiving invoice. Send amount to Two Tickets Plus, 175 East State Street, Suite 1000, Salt Lake City, UT 84111
Phone # 801.328.5000 Fax # 801.328.5009

Scope / Level of Automation

Functions	Priority	Low-End Automation	Medium Automation
Add Customer Information	Mandatory	Clerk Data Entry	Automatic from activity
Search for Available Seats	Mandatory	Periodic listing of quantity on hand	Real-Time Update (Internal and Web)
Purchase Tickets for an Event	Mandatory	Clerk Data Entry	On-line and real-time
Purchase a Series	Mandatory	Clerk Data Entry	On-line and real-time
Add a new event package	Mandatory	Clerk Data Entry	Automatic retrieval of events for package
Add a new Event	Mandatory	Clerk Data Entry	Automatic showing of dates and times to choose from
Add Pricing Scheme with Categories	Mandatory	Clerk Data Entry	Automatic grouping of prices and placing of sections
Add a New Section	Mandatory	Clerk Data Entry	Automatic from activity
Sell Tickets on Discount	Mandatory	Clerk Data Entry	Real-Time Update (Internal and Web)
Add a Foreign Venue	Mandatory	Clerk Data Entry	Real-Time
Reports			
Produce transaction summary reports	Important	Printed on Request	View online and real-time
Produce report showing available seats for an event	Important	Printed on Request	View online and real-time
Produce report showing venues transactions	Important	Printed on Request	View online and real-time
Produce a cost/benefit analysis report	Important	Printed on Request	View online and real-time

Hardware Recommendations

We would recommend the following hardware to go with our software:

Main Theater Site

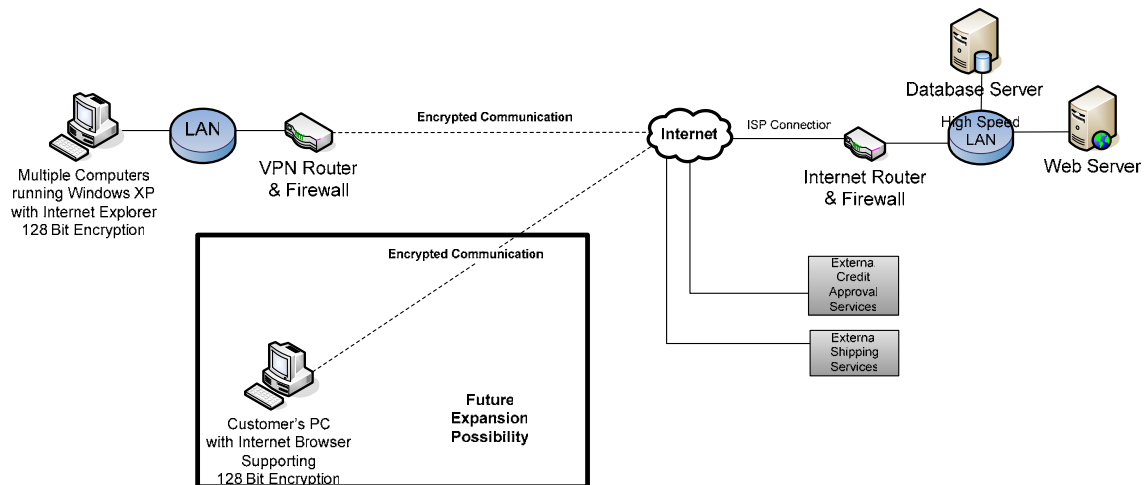
1. Dell Dimension 2400 with flat panel screens for all terminals
2. Dell PowerEdge SC1420 with Xeon Processor for web server
3. Dell PowerEdge 1600SC with Dual Xeon processors for database server
4. Fiber optic connection between the database server, the web server and the internet router
5. Cisco internet router with built in firewall
6. High Bandwidth connection to the internet (T1 or T3)
7. Connection to External Credit Services through internet
8. Connection to External Shipping Services through the internet
9. All communications between computers using TCP/IP

Remote Theater

1. Dell Dimension 2400 with flat panel screens for all terminals
2. Cisco VPN Router to connect all the other theater's computers to the database
3. 100 MB connection through an Ethernet connection using TCP/IP
4. Connection to internet

Future Expansion: Customers Online

1. Any type of computer
2. Connection to the internet
3. Web browser with 128 bit encryption



Recommendations for Implementation

Requirements Criteria	Weight (5= high, 1= low)	Alternative	Alternative 2 [Package software] www.vendini.com			
		1 [In- House]	Raw	Extended	Raw	Extended
General						
Availability of experienced staff	4	4	16		4	16
Development Costs	4	5	20		4	16
Expected value of benefits	5	5	25		5	25
Length of time until deployment	5	3	15		5	25
Requirements for internal expertise	3	3	9		3	9
Organizational impacts (retraining)	3	4	12		3	9
Performance record of provider	5	3	15		4	20
Level of technical support provided	4	3	12		5	20
Warranties on system	4	5	20		5	20
			144			160
Functional						
Make inquiry on seat, event, production, discount, ticket, package	5	5	25		5	25
Customer makes payment	5	5	25		5	25
Customer returns ticket	5	5	25		5	25
Customer buys ticket	5	5	25		5	25
Manager updates package	4	5	20		5	20
Manager updates venue and corresponding information	4	5	20		5	20
Create production type	4	5	20		5	20
Create seating configuration	3	5	15		5	15
Create discounts	5	5	25		5	25
Create price group for production	5	5	25		5	25
Create various reports	5	5	25		5	25
Handles exchanges	5	5	25		5	25
Handle foreign venue transactions	5	5	25		3	15
Create foreign venue	5	5	25		3	15
			325			305
Technical						
Robustness	5	?	20		4	20
Programming errors	4	?	16		4	16
Quality of code	4	?	20		5	20
Documentation	3	5	15		5	15
Ease of installation	3	5	15		4	12
Flexibility	4	4	16		3	12
Structure	4	4	16		4	16
User-friendliness	4	5	20		4	16
Performance(response time)	5	?	25		5	25
Scalability	3	3	9		4	12
Compatibility	4	4	16		4	16
			188			180
TOTAL			657			645

IMPLEMENTATION ANALYSIS

The implementation that will best fit Two Tickets Plus will be a combination of in-house and turnkey software. In-house technicians will modify the software package available from Vendini Solutions. Vendini is a professional in ticket sales software and could benefit Two Tickets Plus substantially. Vendini specializes in box office sales. They offer box office software, web sales, event promotion software, and the ability to run a number of reports.

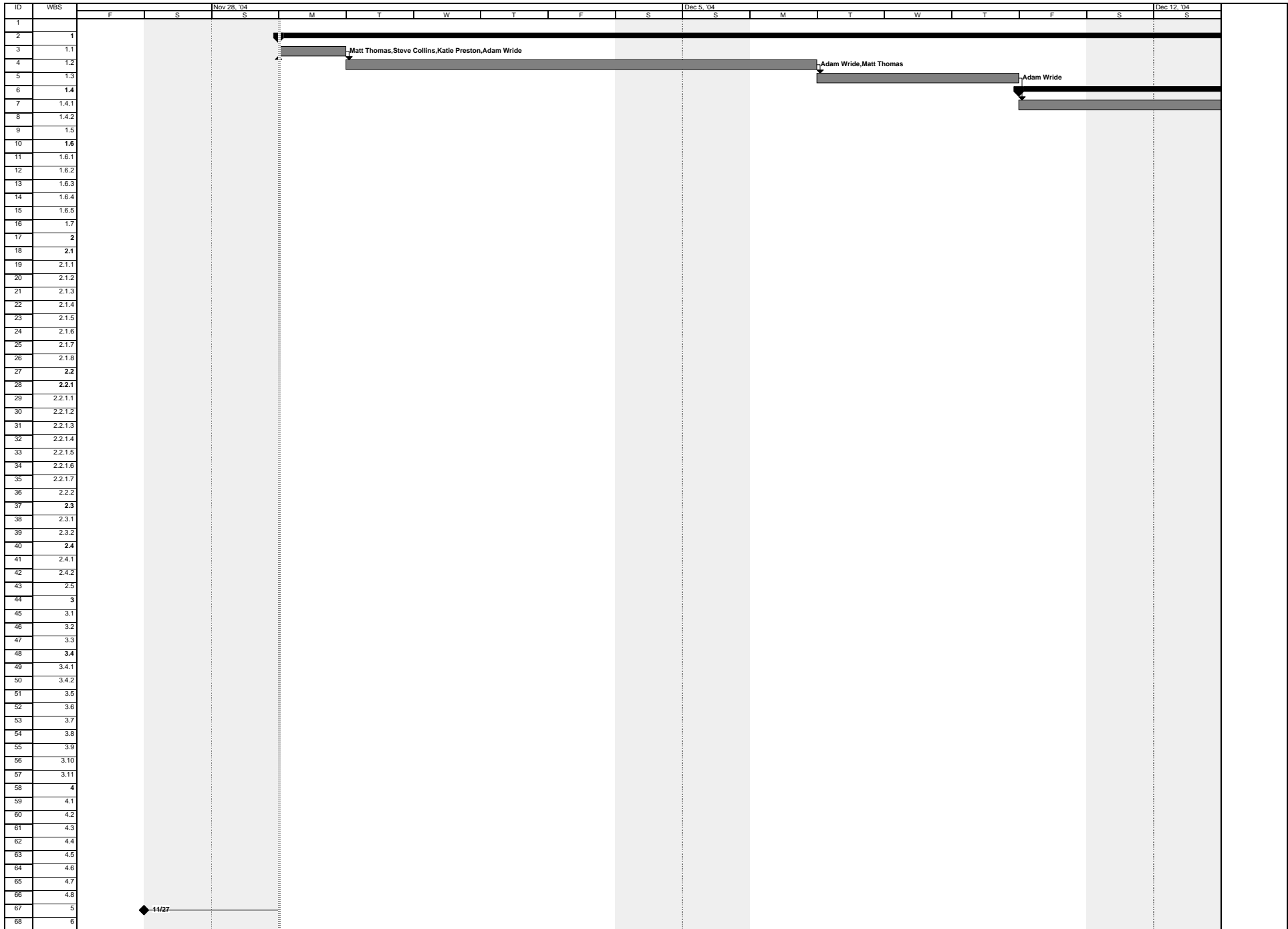
Based on the matrix analysis, Vendini was a better match when it came to the General Requirements. They offer a simple solution with a very powerful technical support that could be implemented immediately.

For Functional Requirements, in-house was a better alternative, with a slight advantage. By completing the system in-house we could curtail the requirements into the system while it was being built. The disadvantage to Vendini came when we tried to add foreign venues into the system. This is the part that we recommend our in-house team modify on the Vendini software.

For the Technical requirements, our in-house team could also do an outstanding job and the job would be sufficient for our needs. However, it is only a slight advantage over Vendini's technical side that in-house is favored. Much of this is also speculation considering that this is the first system that this team would be building.

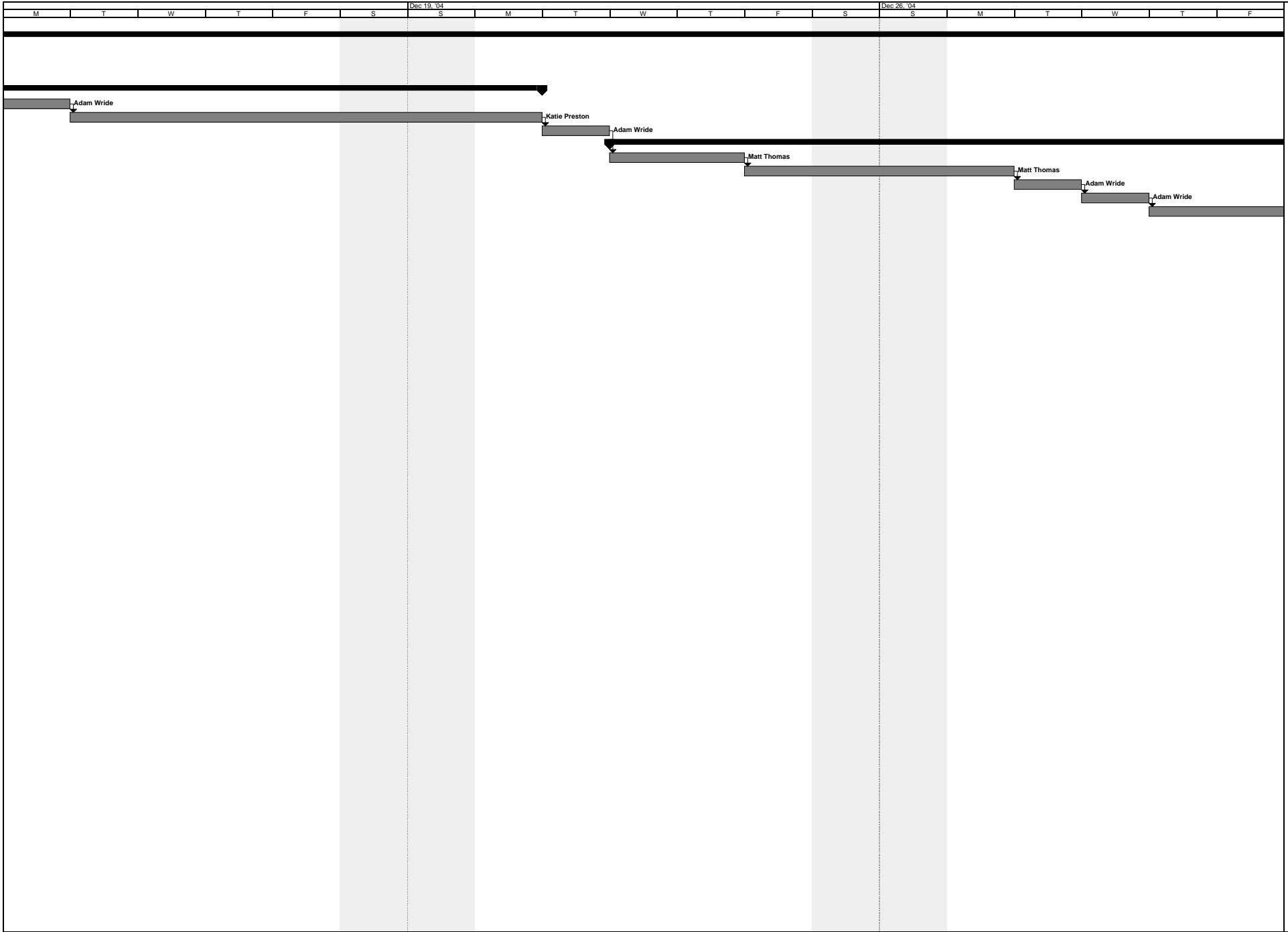
For these reasons, we recommend the purchase of Vendini's software to use as a base upon which we will use our in-house team to make modifications and add aspects such as the issues concerning foreign venues being interrelated.

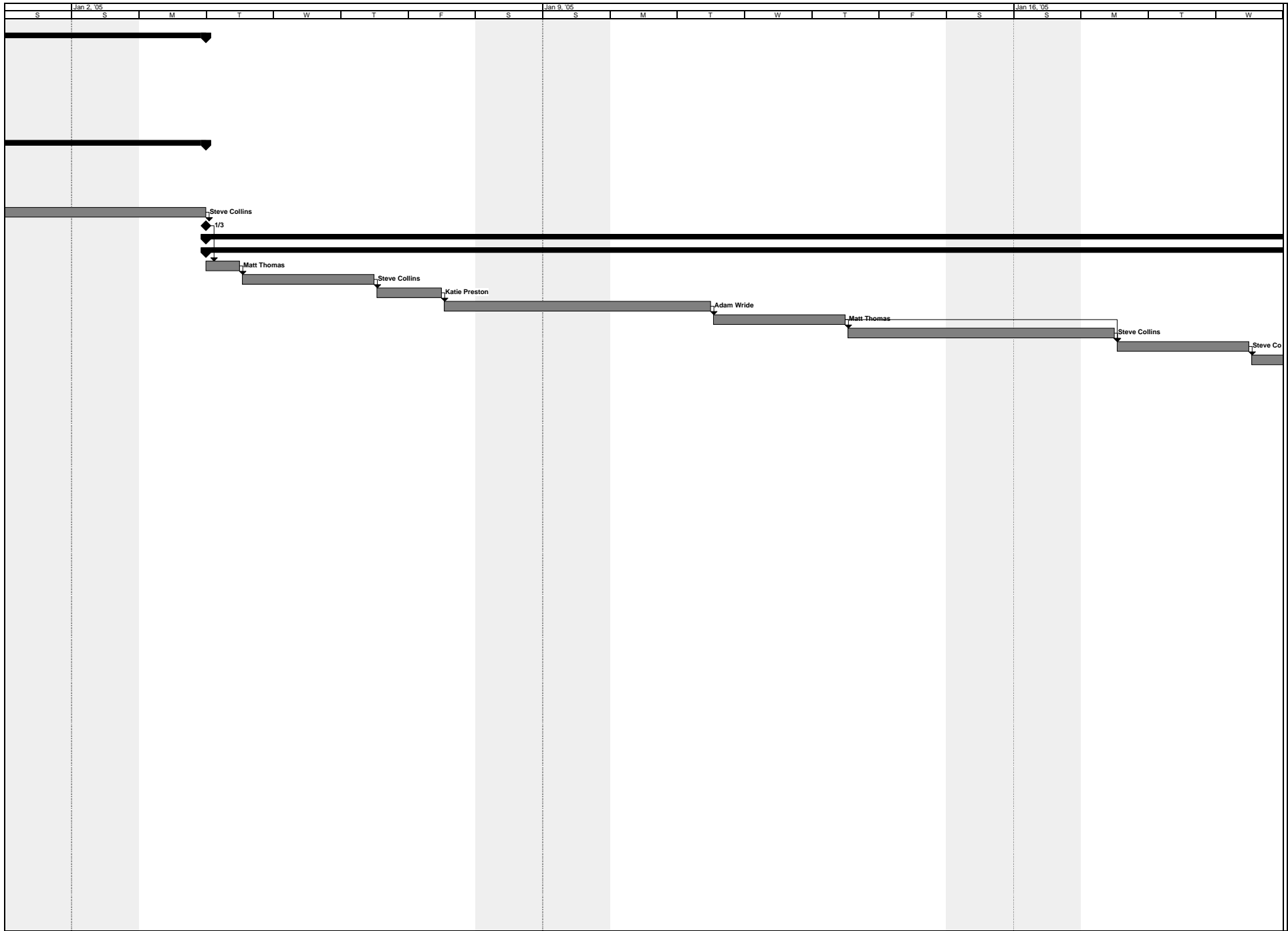
Appendix

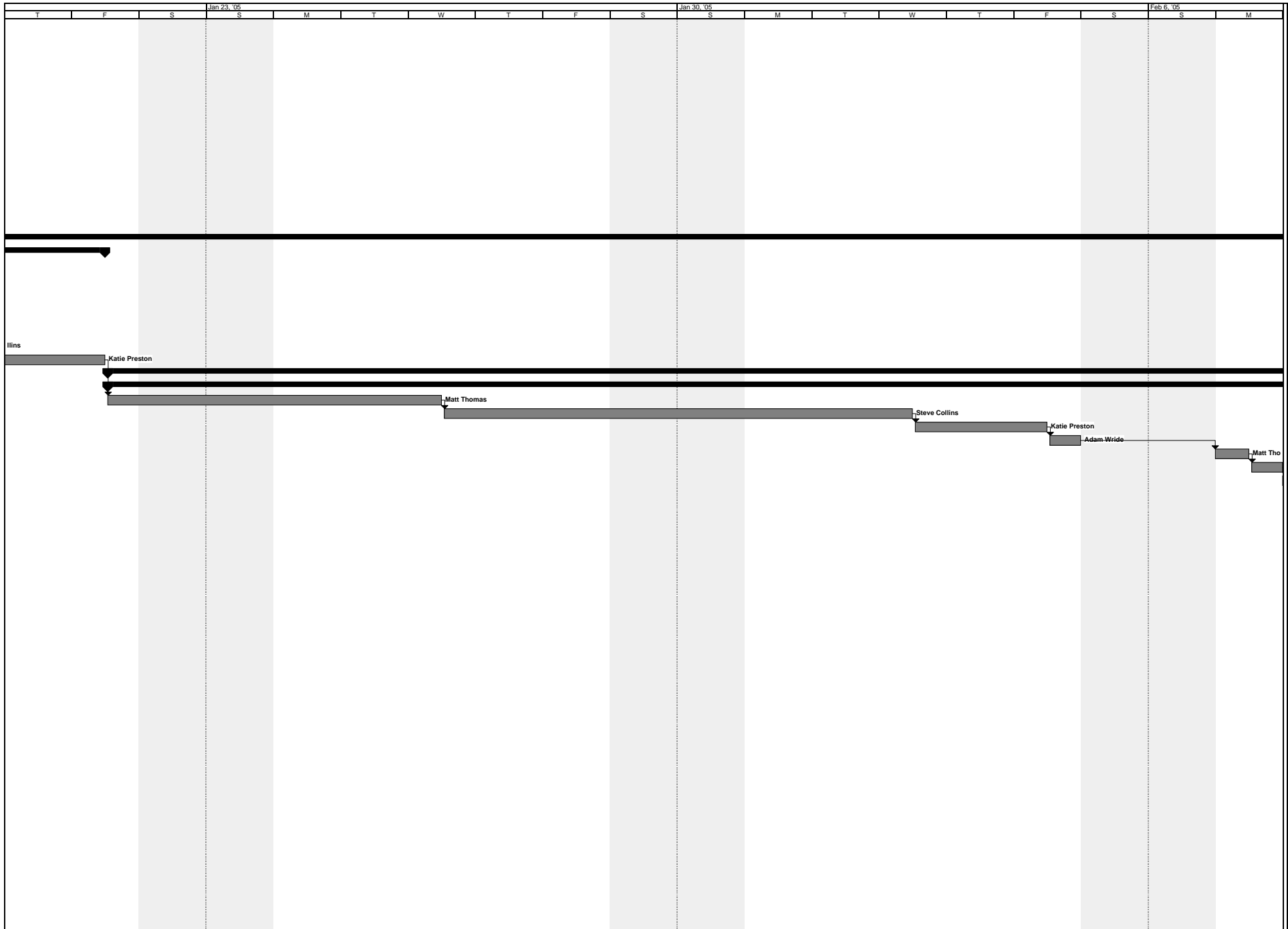


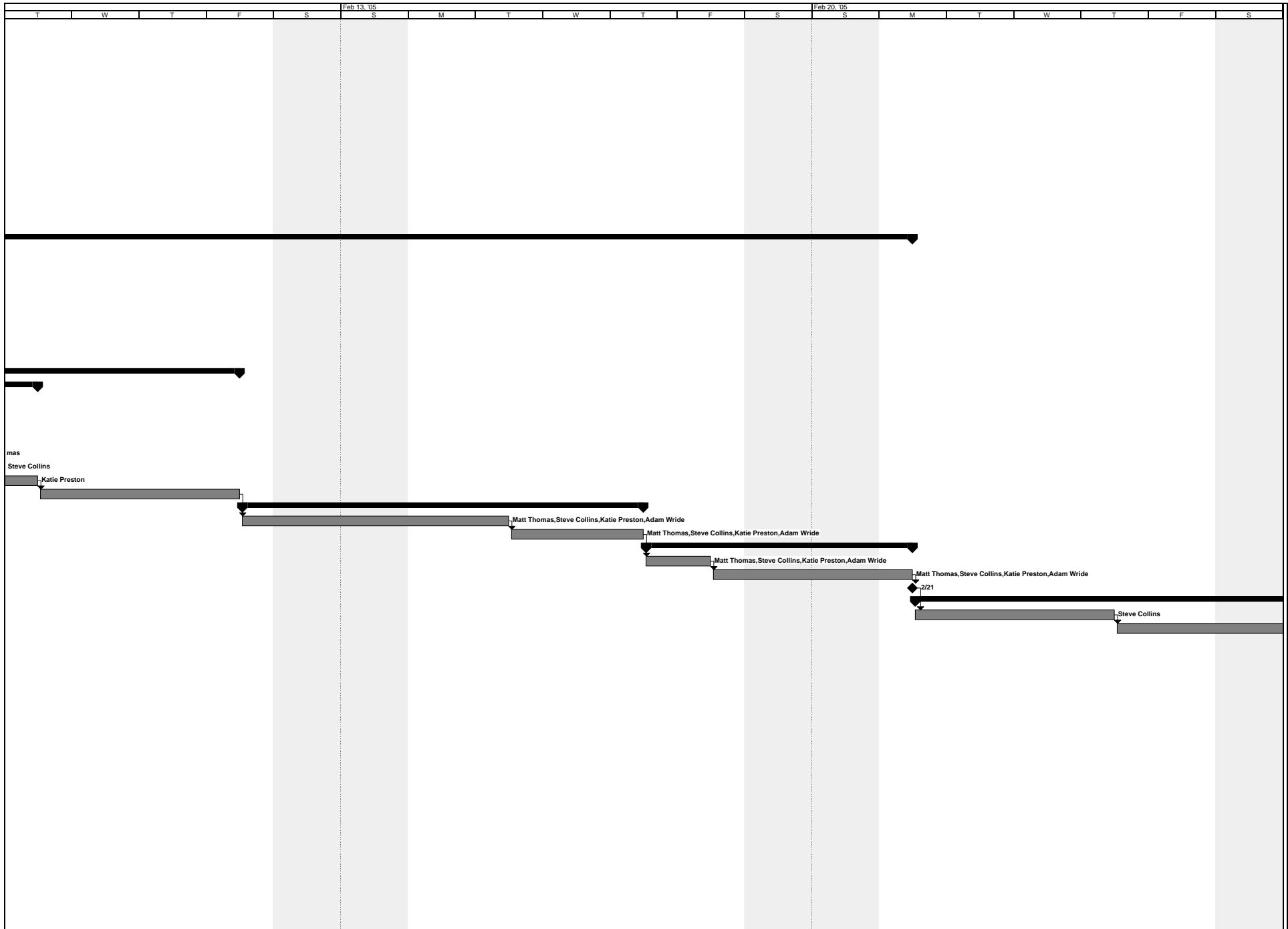
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Date: Mon 11/29/04

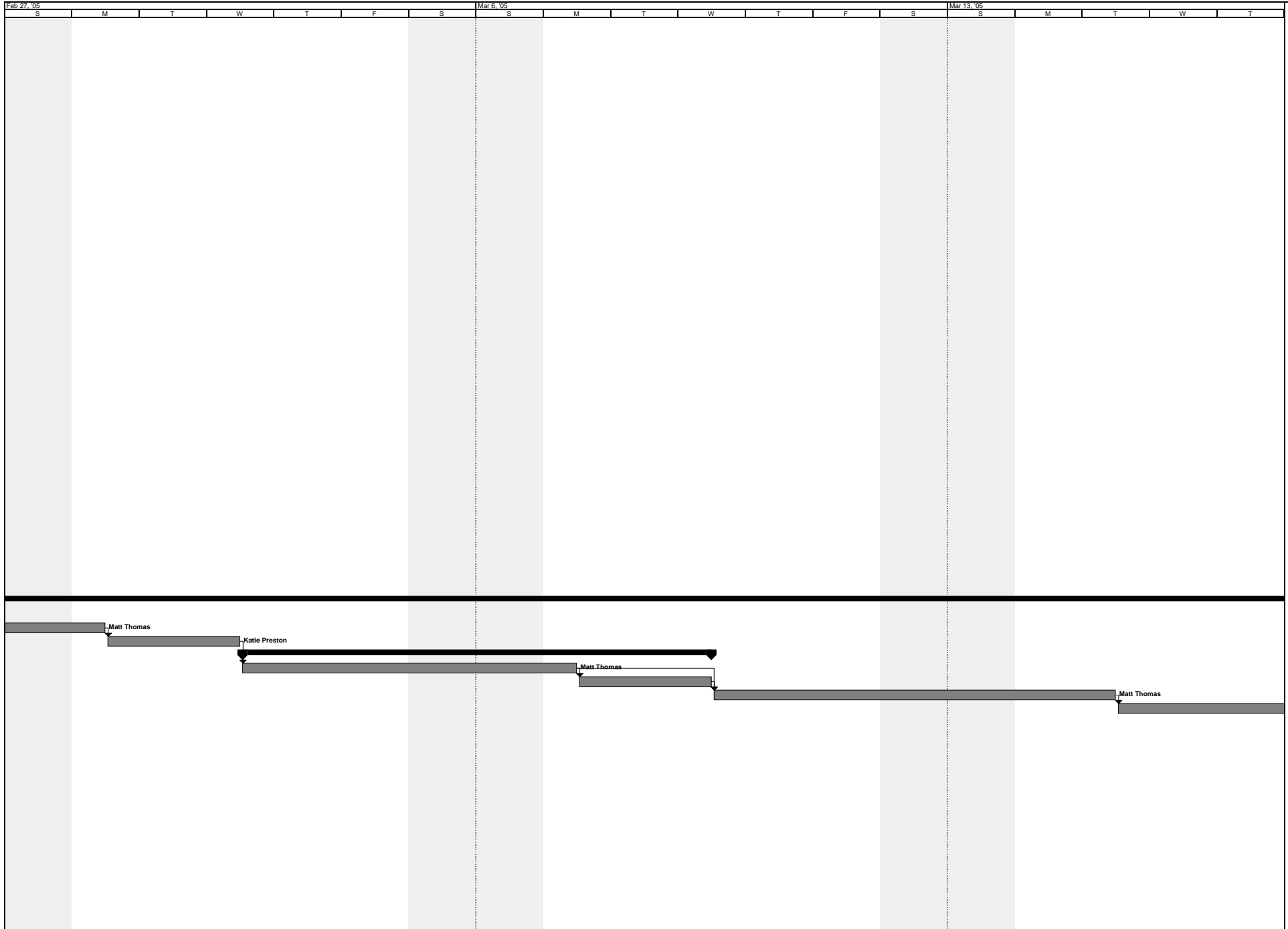
Task Progress Summary External Tasks Deadline
 Split Milestone Project Summary External Milestone



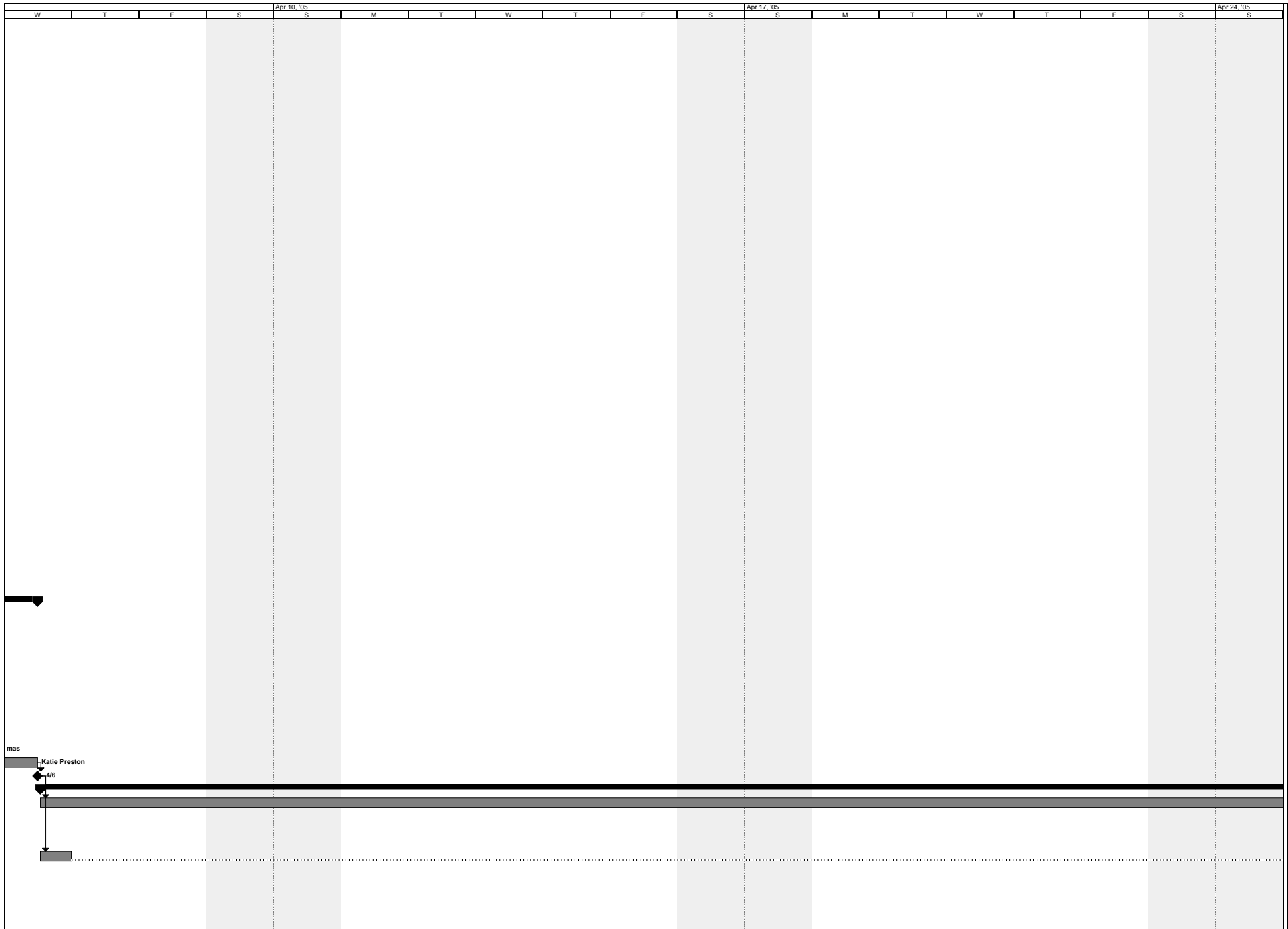






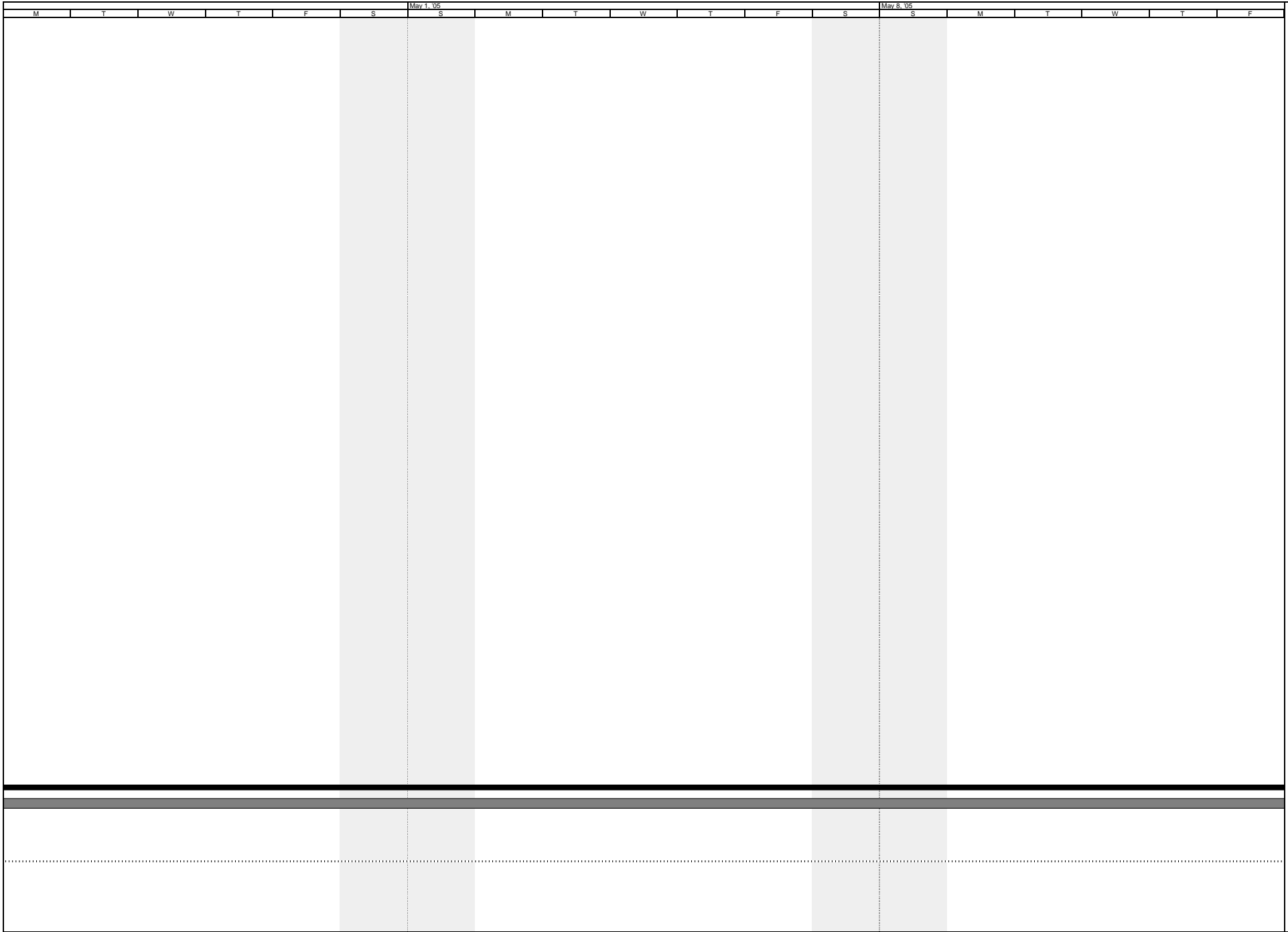






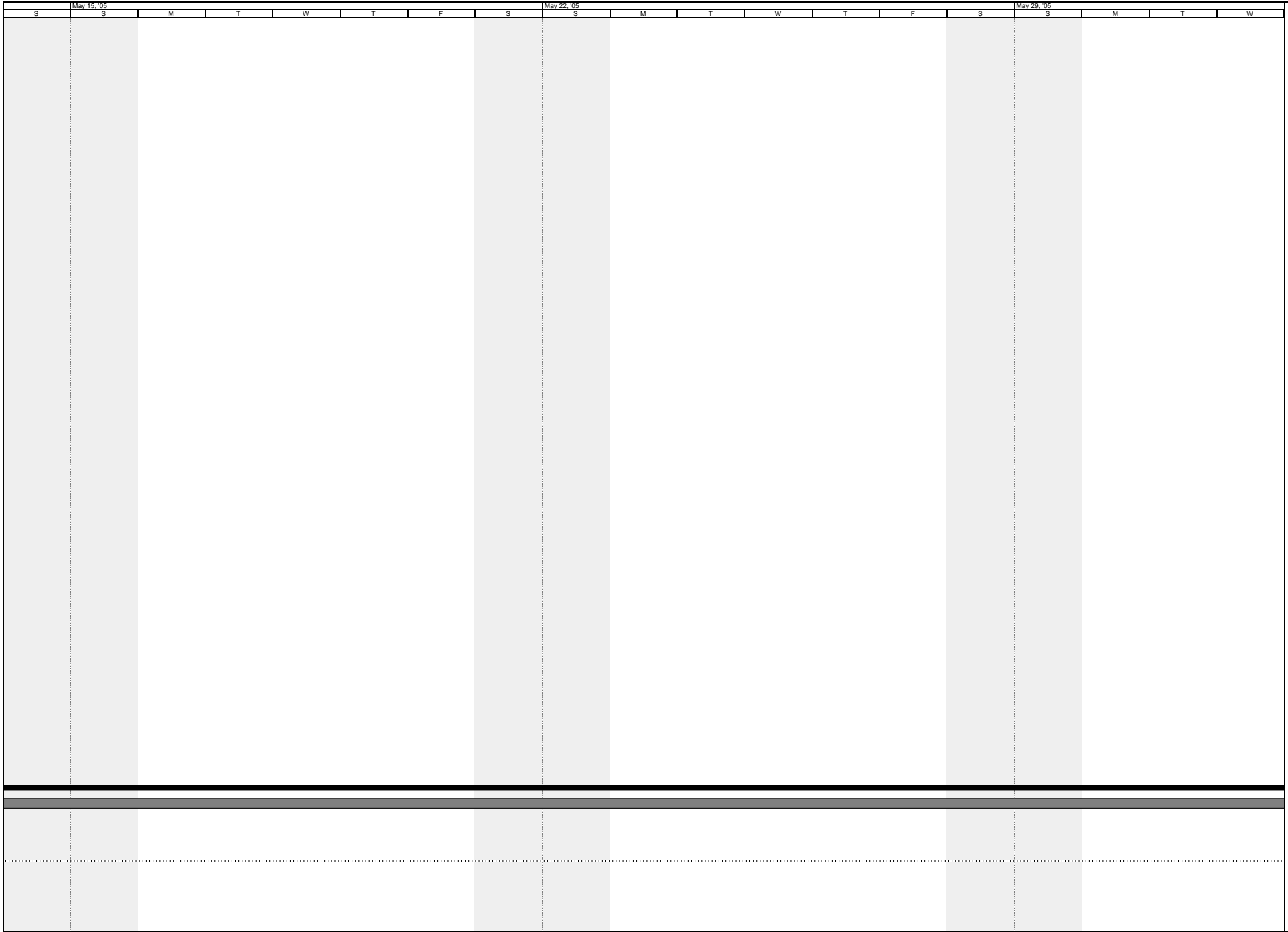
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Date: Mon 11/23/04

Task		Progress		Summary		External Tasks		Deadline		
Split		Milestone		Project Summary		External Milestone				



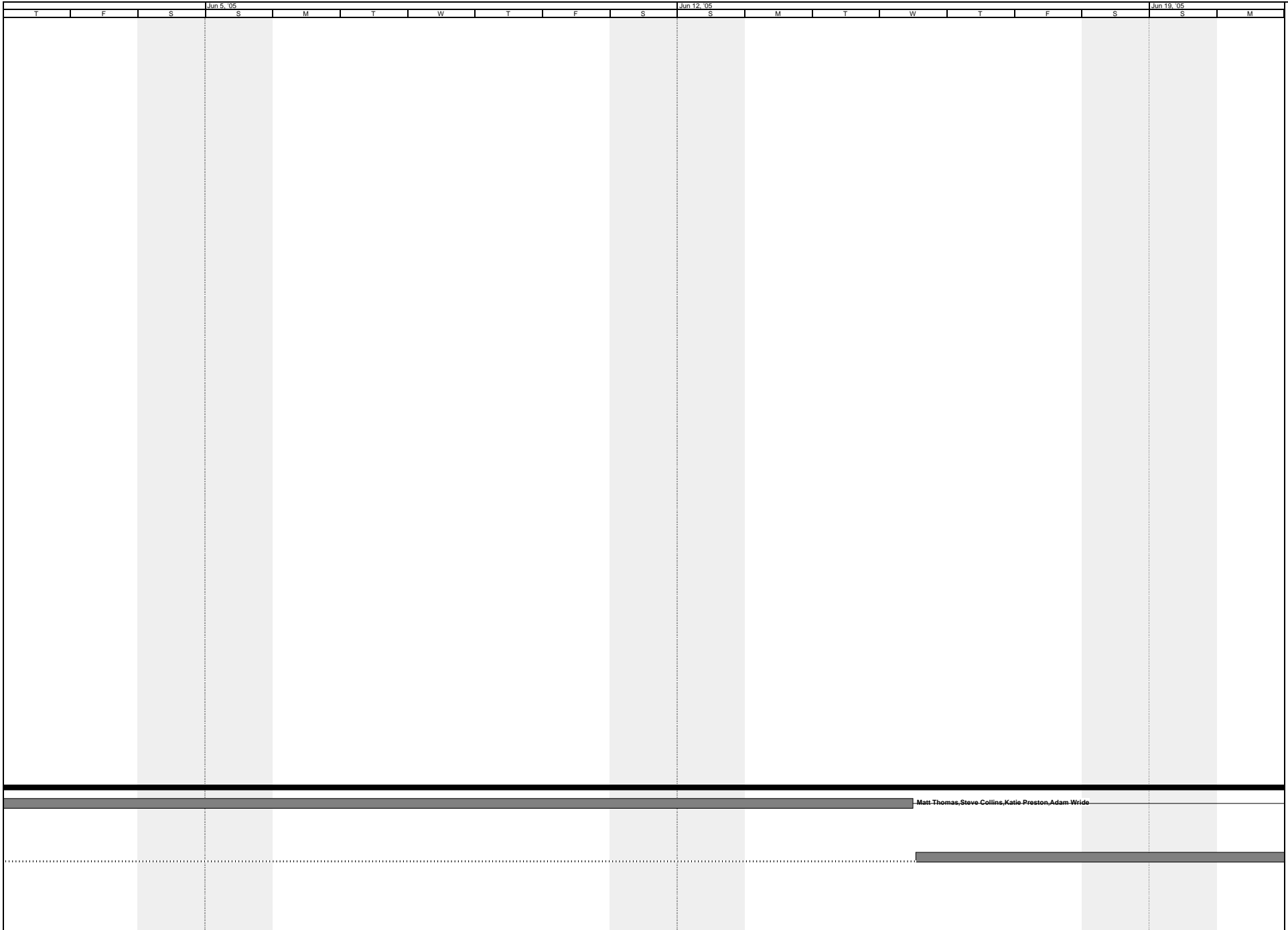
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Date: Mon 11/23/04

Task		Progress		Summary		External Tasks		Deadline	
Split		Milestone		Project Summary		External Milestone			



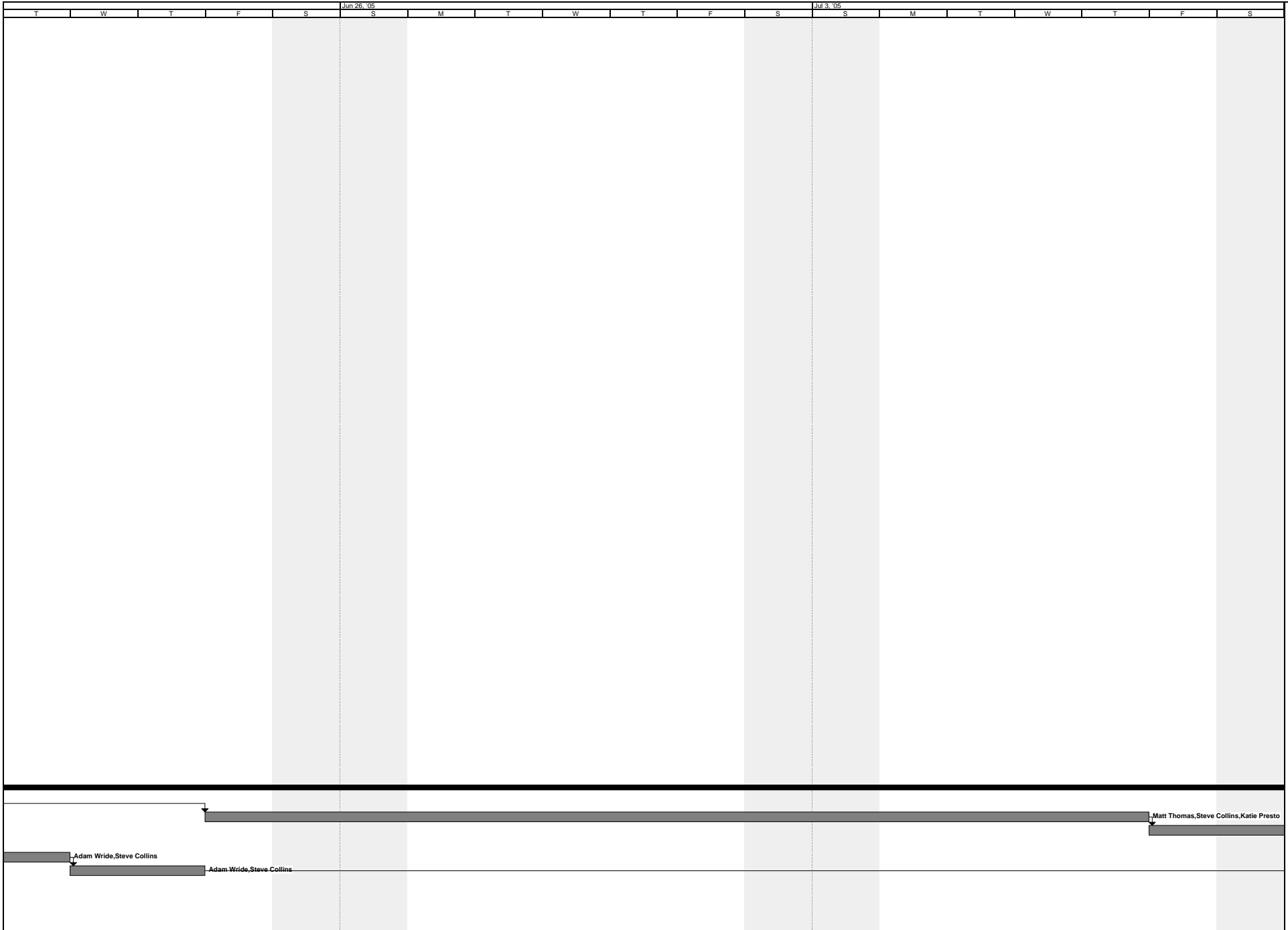
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Date: Mon 11/29/04

Task		Progress		Summary		External Tasks		Deadline	
Split		Milestone		Project Summary		External Milestone			



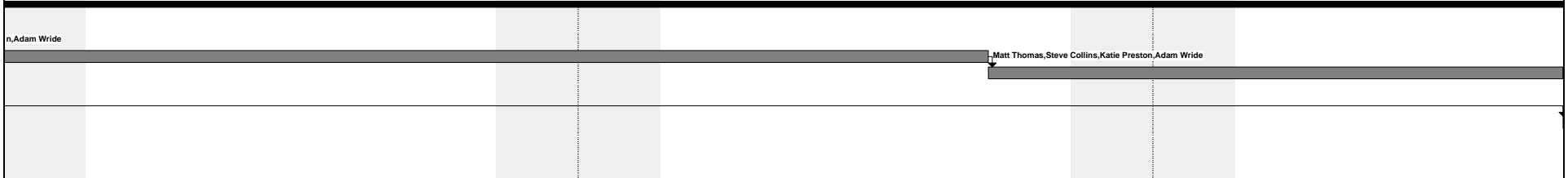
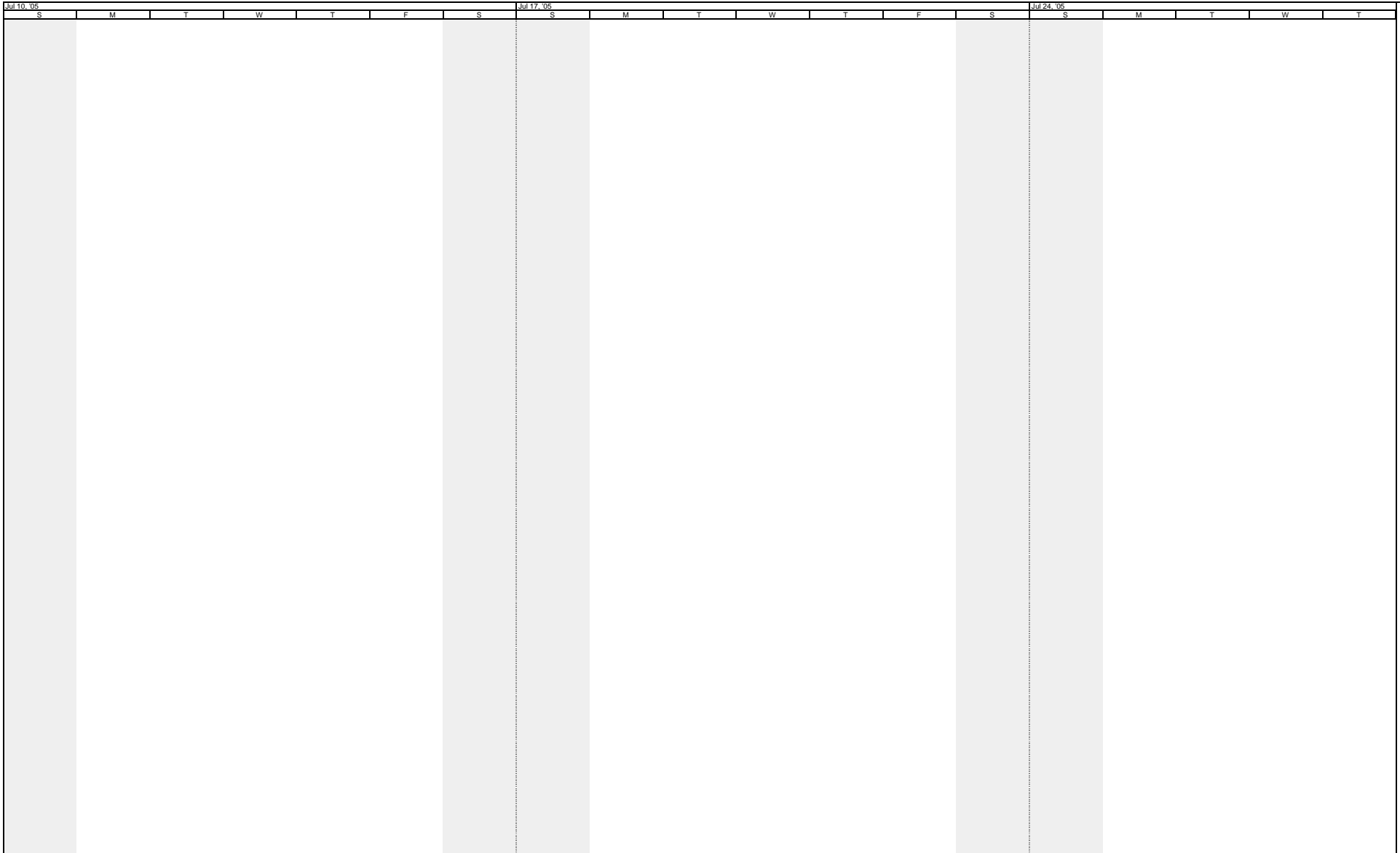
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Date: Mon 11/23/04

Task		Progress		Summary		External Tasks		Deadline	
Split		Milestone		Project Summary		External Milestone			



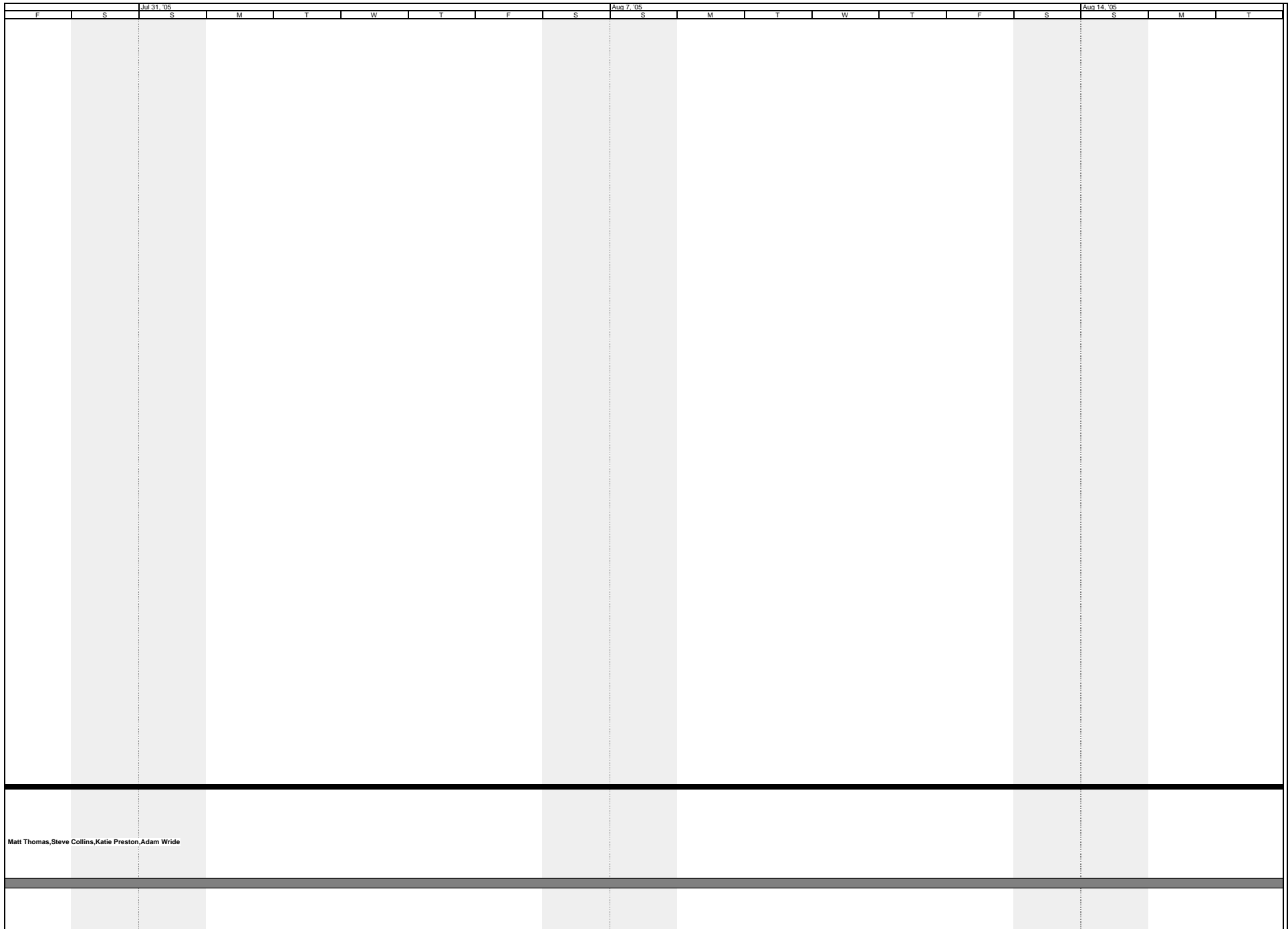
Project: projectPlanTT+
Date: Mon 11/23/04

Task		Progress		Summary		External Tasks		Deadline		
Split		Milestone		Project Summary		External Milestone				



Project: projectPlanTT+
Date: Mon 11/23/04

Task		Progress		Summary		External Tasks		Deadline	
Split		Milestone		Project Summary		External Milestone			



Project: projectPlanTT+
Date: Mon 11/23/04

Task		Progress		Summary		External Tasks		Deadline	
Split		Milestone		Project Summary		External Milestone			

