

ESOEN Lab 1 Report

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November 30, 2022

1 Project specification

1.1 System description

My project topic was theater.

What is the goal of the system? The goal of the system is to allow users to book seats for theater spectacle.

What scope does it cover? Project needs have external web interface for booking tickets and internal for creating events.

What functionalities does it offer? System allows theater visitors to book tickets for a spectacle and theater staff to create bookable events.

Who are the intended users? Theater owners, event managers and visitors.

Do the customers have the access to the system? Yes, the web interface system must allow customers (external to theater) to access it in order to function properly.

1.2 Problem domain glossary

- Theatre Company - Institution that takes care of scheduling, organizing and finding theater venue.

- Theatre Venue - Place where the spectacle can take place.
- Ticket - Item identifying ticket holder as being allowed to watch a spectacle.
- Spectacle - Event organized by theatre company.
- Potential Customer - Person who has not yet buy the theatre ticket.
- Ticket Holder - Person who has already bought the theatre ticket.
- Event Manager - Person responsible for scheduling spectacle dates and filling this information into our system.
- Spectacle Date - Specific Year, Month, Day, Hour and minute on which the spectacle will be played.
- Seat - Area assigned to specific ticket holder from which they are expected to watch the spectacle
- Booking Ticket - Paying for ticket in the system

1.3 Requirements specification

1.3.1 Functional requirements 1/2

Id	Name	Description	Priority
1.	Spectacle Management	Creating and modifying spectacle	5
1.1.	Creating Spectacle	Entering spectacle details into system and saving them	5
1.1.1.	Managing tickets	Defining tickets limit, price, types and discounts	5
1.1.2	Managing spectacle date	Defining when the spectacle will take place	4
1.1.3	Managing seats	Defining seats placement, types and ticket price for specific seat	2
1.1.2	Creating Spectacle	Specifying date and name of spectacle	5
2	Viewing Bookable spectacles	Potential Customer view allowing them to see what spectacles are available to book	5
2.1	Spectacle Generalized list	Spectacle list with most general information, title, date, venue, remaining tickets and their price	5
2.2	Spectacle detailed view	Accessible after choosing one of the spectacles, containing in addition to general information: spectacle description, actors that will take part in it, director, date of when it was first played	1

1.3.2 Functional requirements 2/2

3	Booking spectacle ticket	Paying and reserving ticket for specific spectacle	5
3.1	Choosing seat	Choosing specific seat for which potential customer buys ticket from the list	2
3.2	Choosing discounts	Choosing potential discounts like student discount for the ticket	1
3.3	Buying multiple tickets	Buying multiple tickets within one booking ticket operation, with potential group discounts	1
3.3	Paying for ticket	Sending money to the theater company	5
3.4	Verifying payment	Verifying whether money was received	5
3.5	Receiving ticket	Getting the ticket or id allowing to receive ticket later in theater venue	5
3.6	Refunding tickets	Ticket holder returns the ticket back to the system and receives 50% of money back	1

1.3.3 Non-functional requirements

- In general system should have the uptime of more than 90% per year, which means no more than 36 days of downtime per year
- Booking tickets should support at most 100 people at the same time for 99% of system uptime
- Verifying payment should not take more than 10 seconds in more than 90% of cases
- System should be able to hold information about no more than 50 spectacles

- System should prioritize giving specific seat to a person who first bought the ticket for this seat
- Ticket should be received in digital form if possible, but there should be a fallback mechanism which allows to receive ticket