Software Development Methods

Parvulescu Valeriu

1231A

Contents:

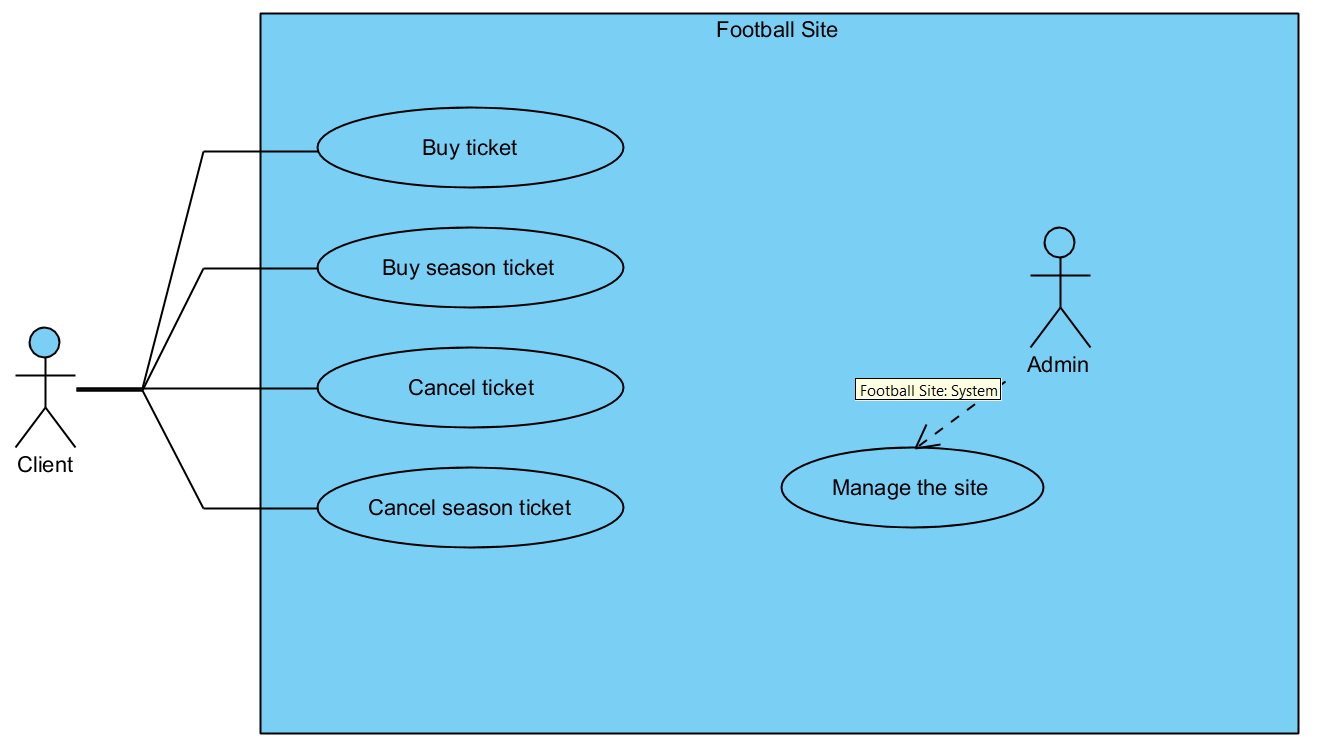
**1. Business Model-Business Use Case Model, Business Domain Model,Activity Diagrams**

**2. Requirements Analysis Model**

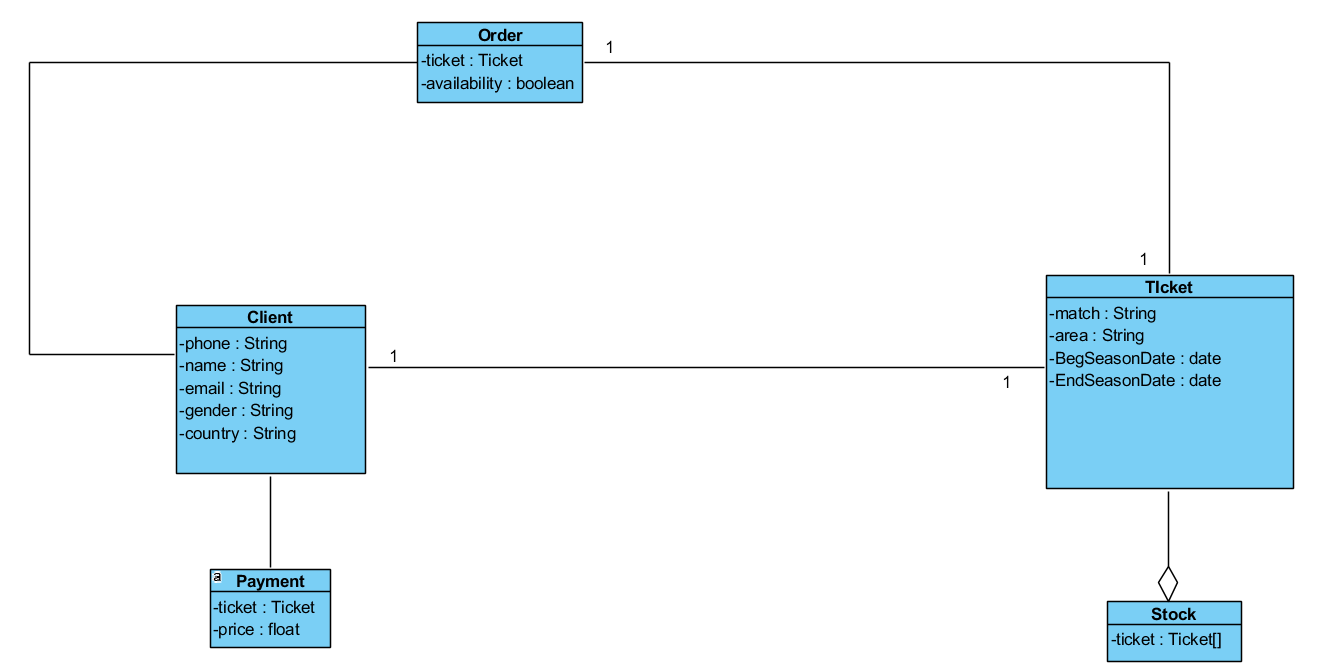
**3.Architecture: Deisgn Class Diagram,Sequence Diagram,Statechart Diagram**

**Part 1:**

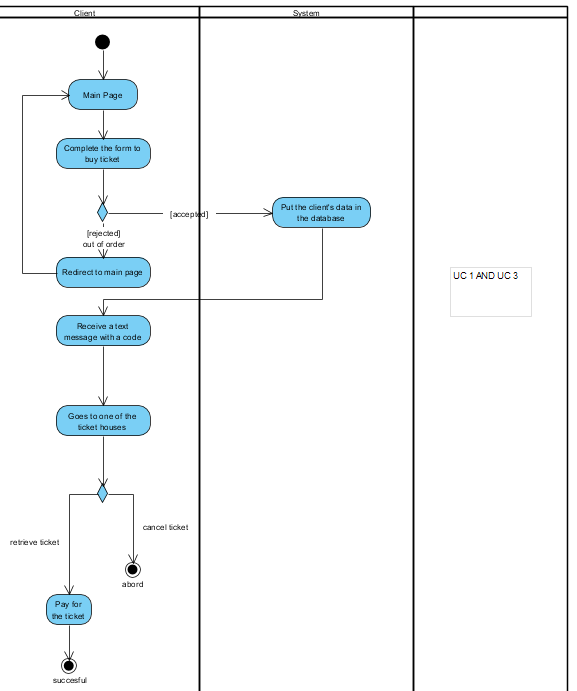
**Business Use case model:**

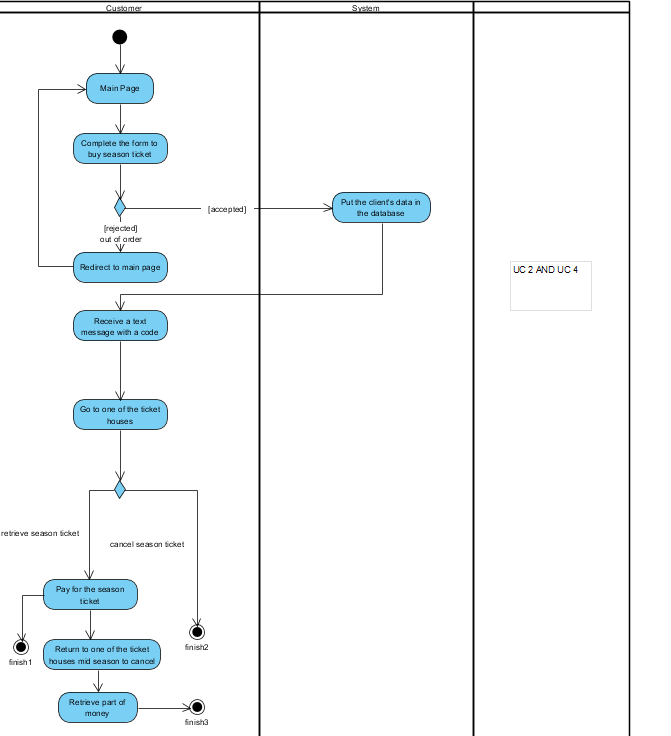


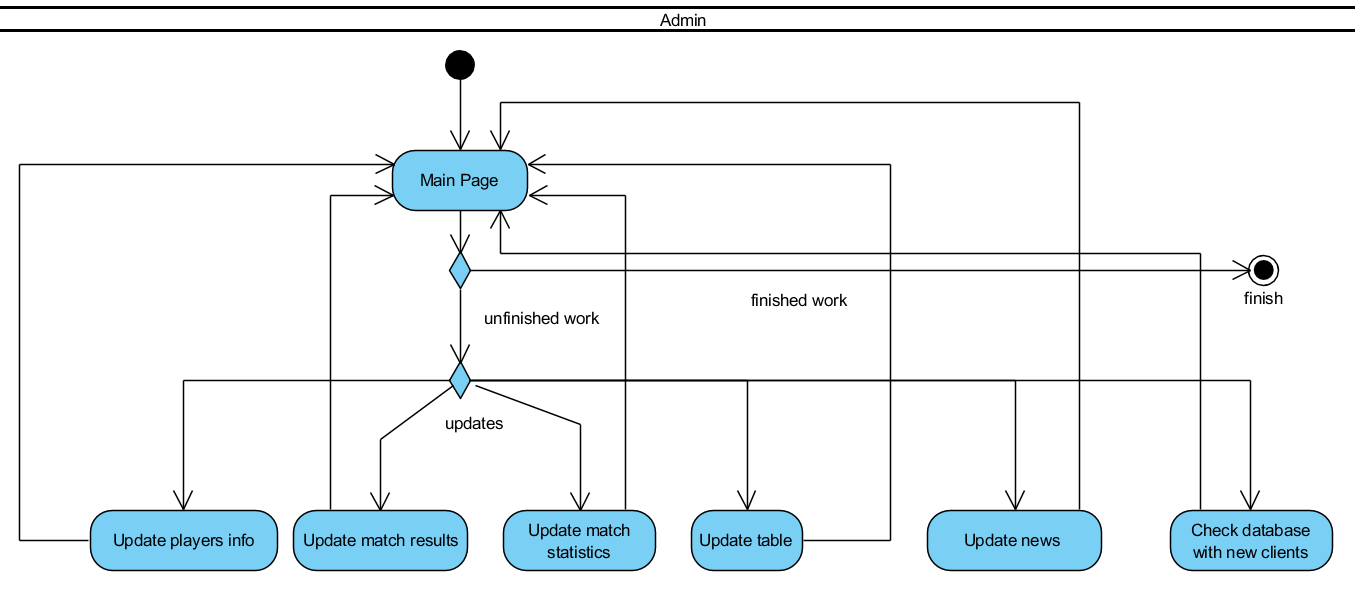
Business Domain model:



Activity Diagrams:







Part 2:

**Requirements:**

System management:

-System receives ticket request from client 8/10

-System gives a response to the client regarding the availability of the ticket 9/10

-In case response is positive,the system sends a text message to the client with an unique code 10/10

-System clears the ticket out of their stock 6/10

Non-Functional Requirements:

Usability:

-training:highschool level

-80% of options can be reached in max 5 steps

Accesibility:

-it is user friendly for all types of people

Performance:

-average function takes 50 miliseconds maximum

Capacity:

-the system provdies 5000 tickets and 1000 season tickets

Reliability:

-Site goes down after 10000 of rapid requests,recovery estimation: 30 seconds-2 minutes

Availability:

-from the beginning of the season until the end of the season for a ticket

-before the beginning of the season for a season ticket

Robustness:

-System validates user input and checks for errors

-System can tackle thousands of fast requests

Manageability:

-The administrators manage the site and all is system and components

Security:

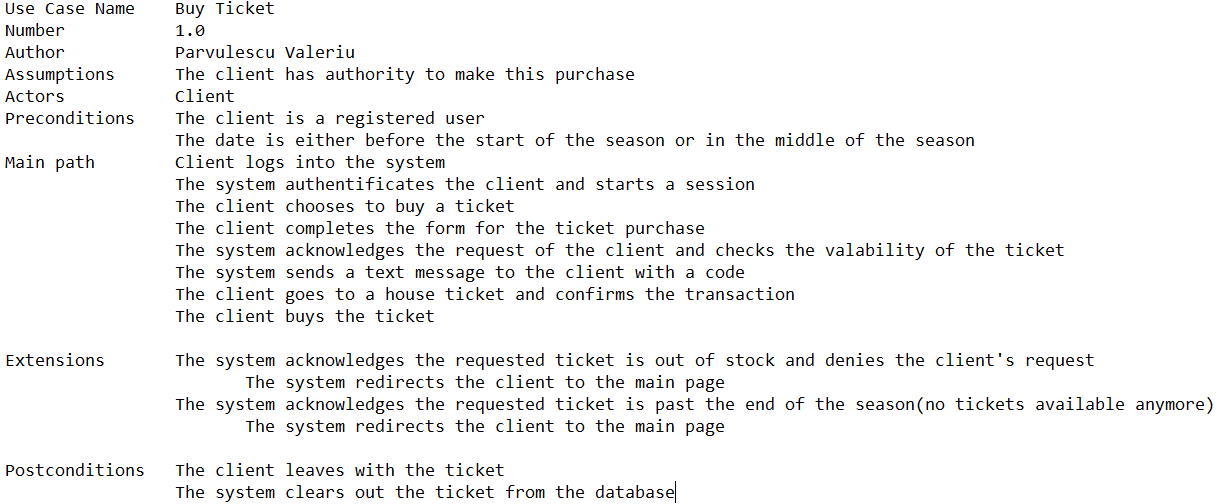
-The user passwords are ecrypted

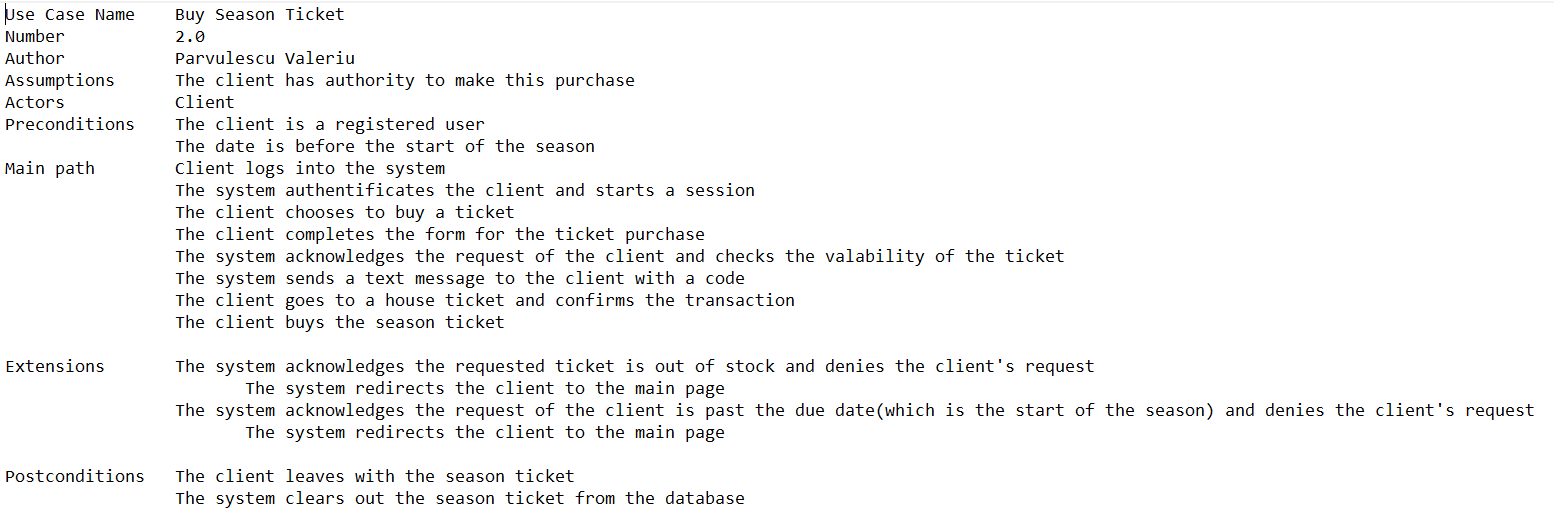
Scalability:

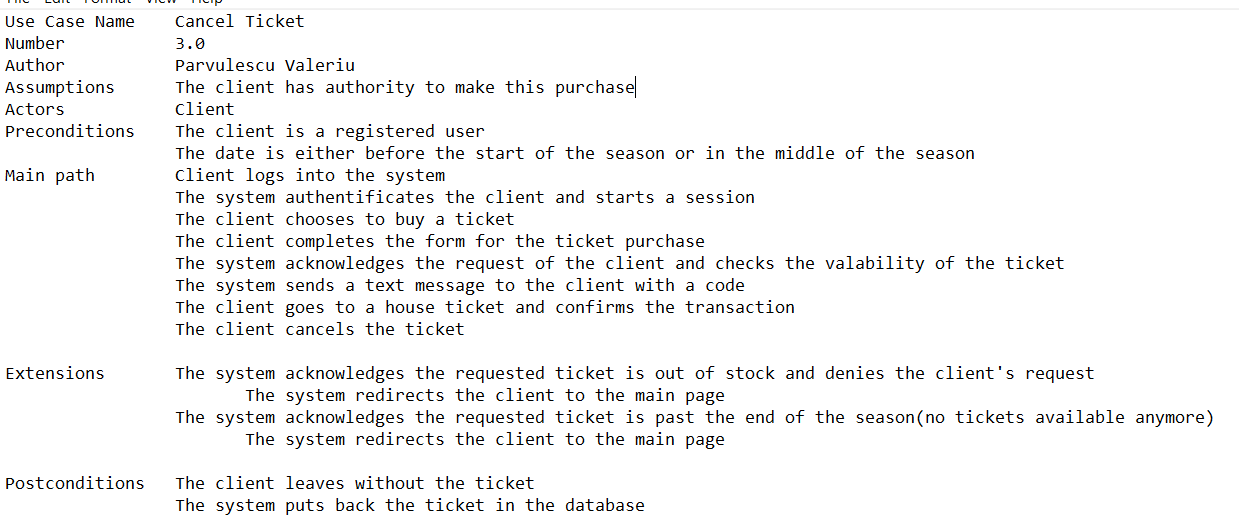
-stock increasing and new sponsor contract renewals at every 50k users

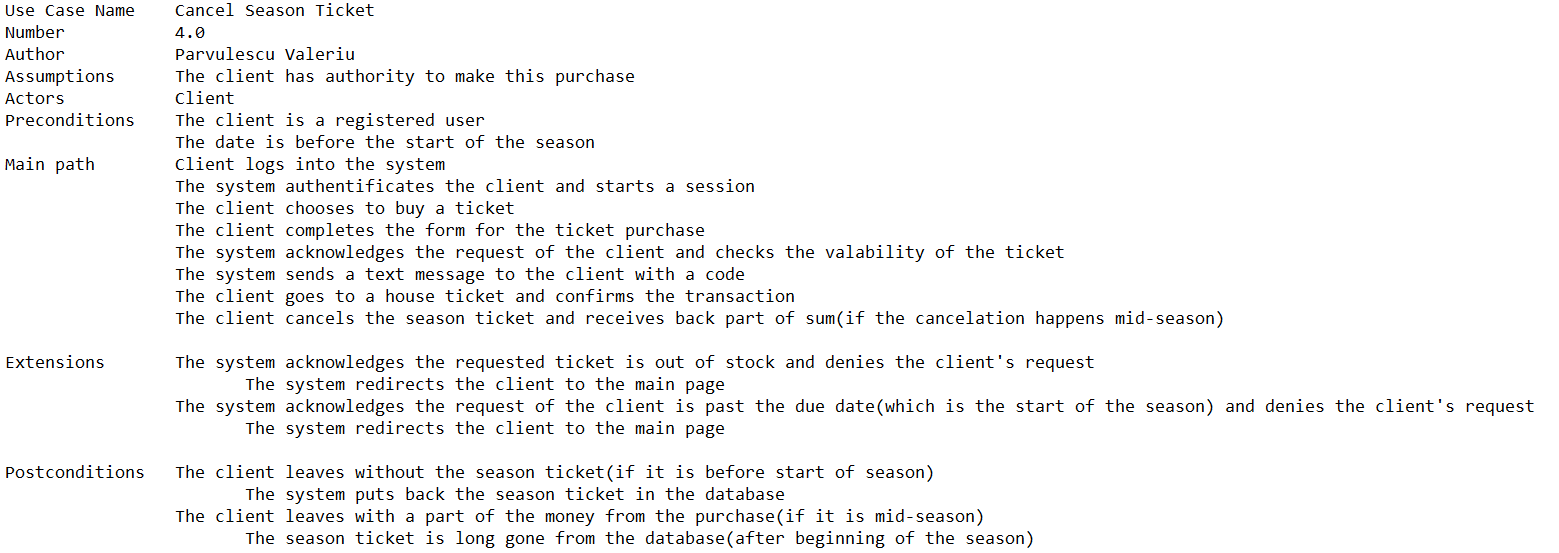
-using of horizontal scalability: multiple servers for fast requests tackling

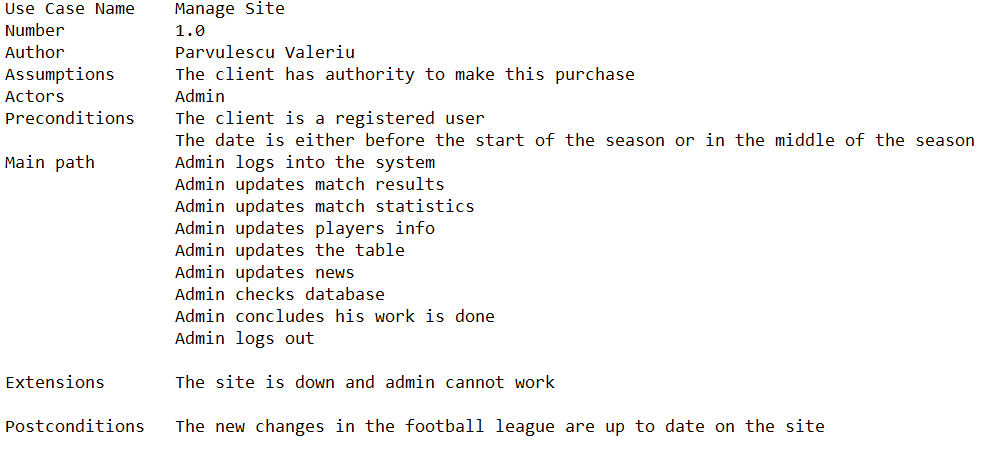
**Use case descriptions:**

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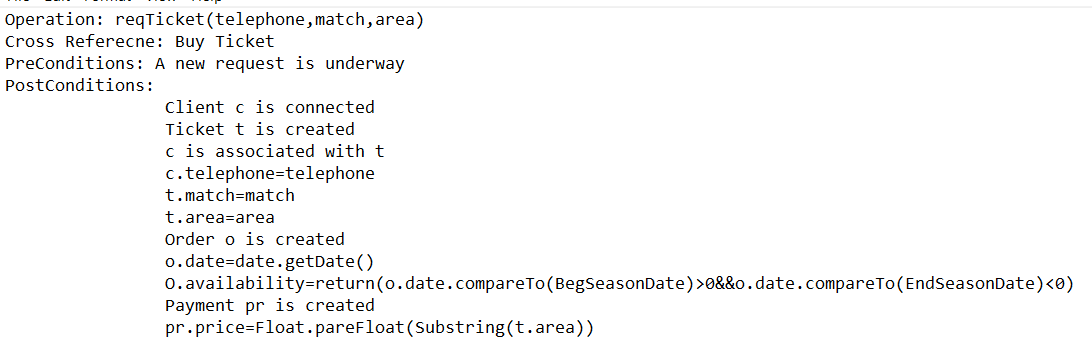
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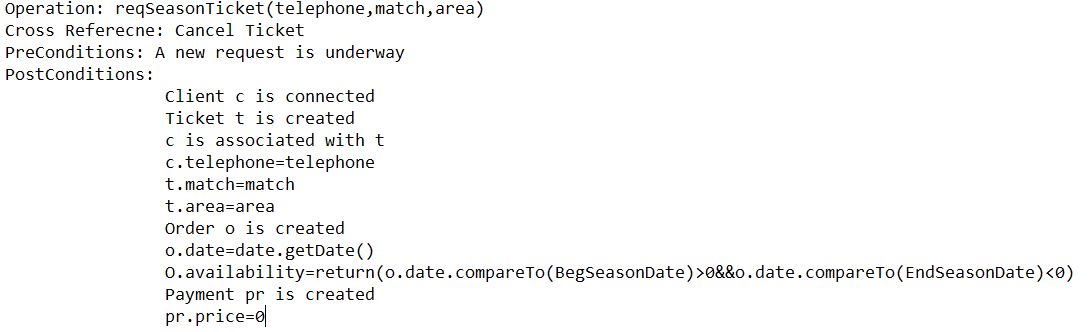


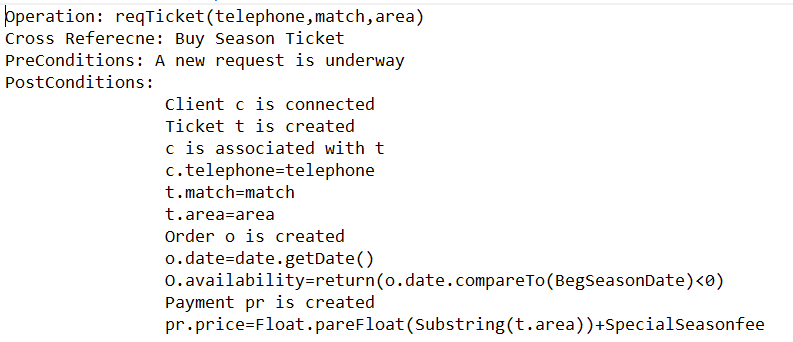


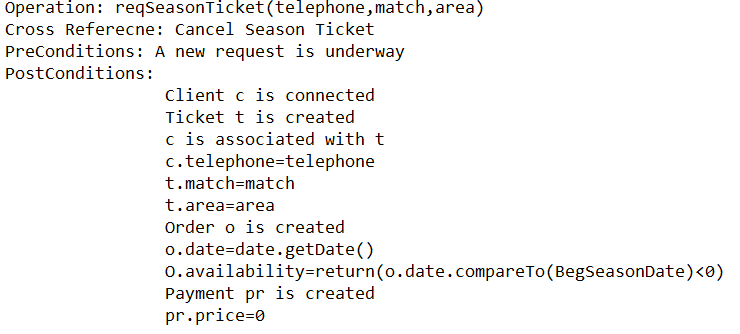


**Operation Contracts**

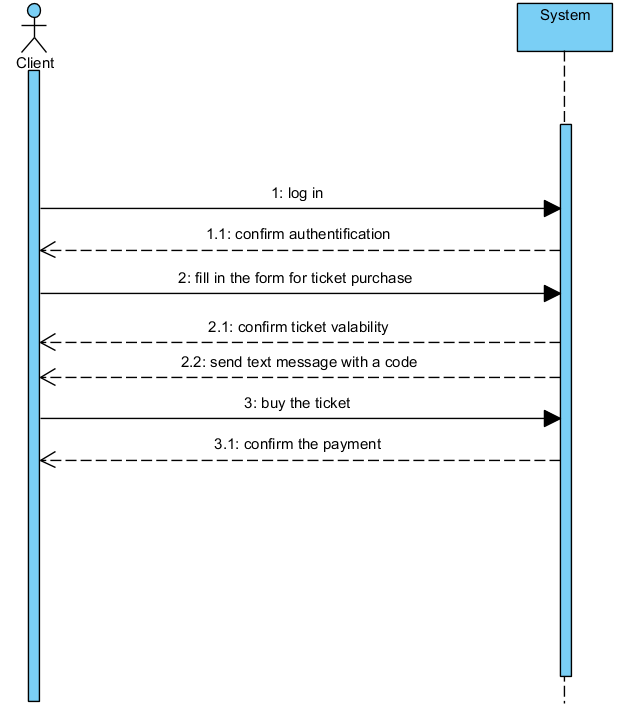
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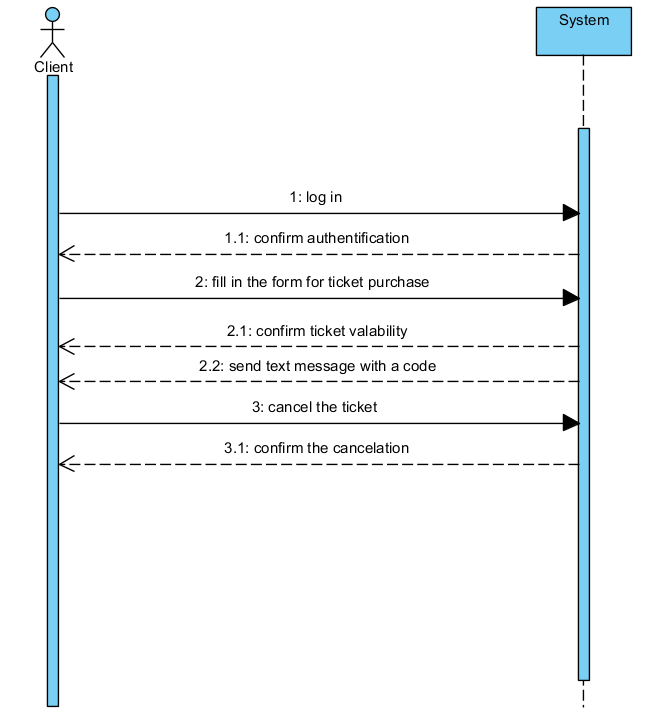
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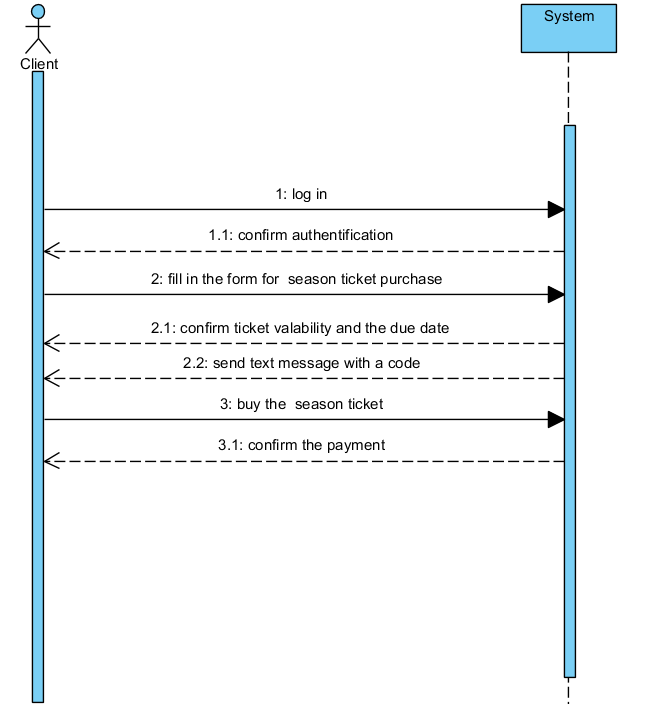
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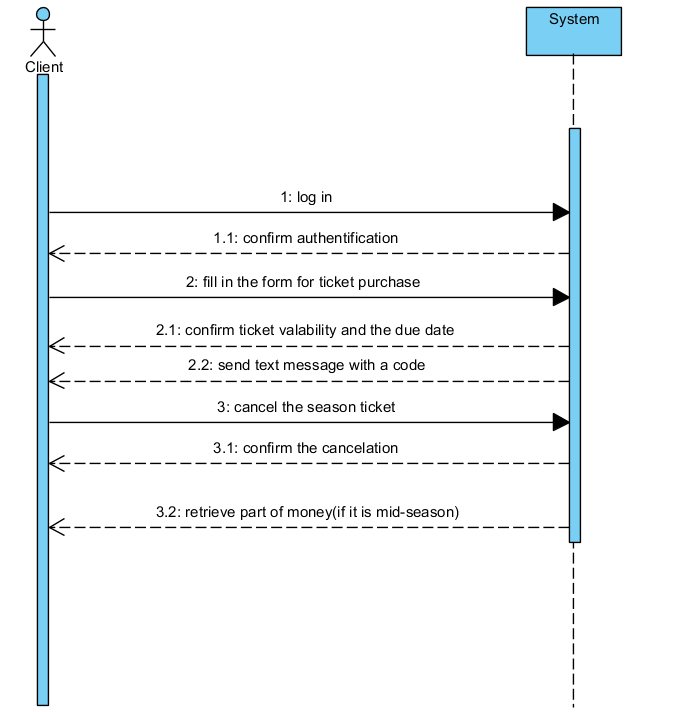
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**Software Sequence Diagrams:**

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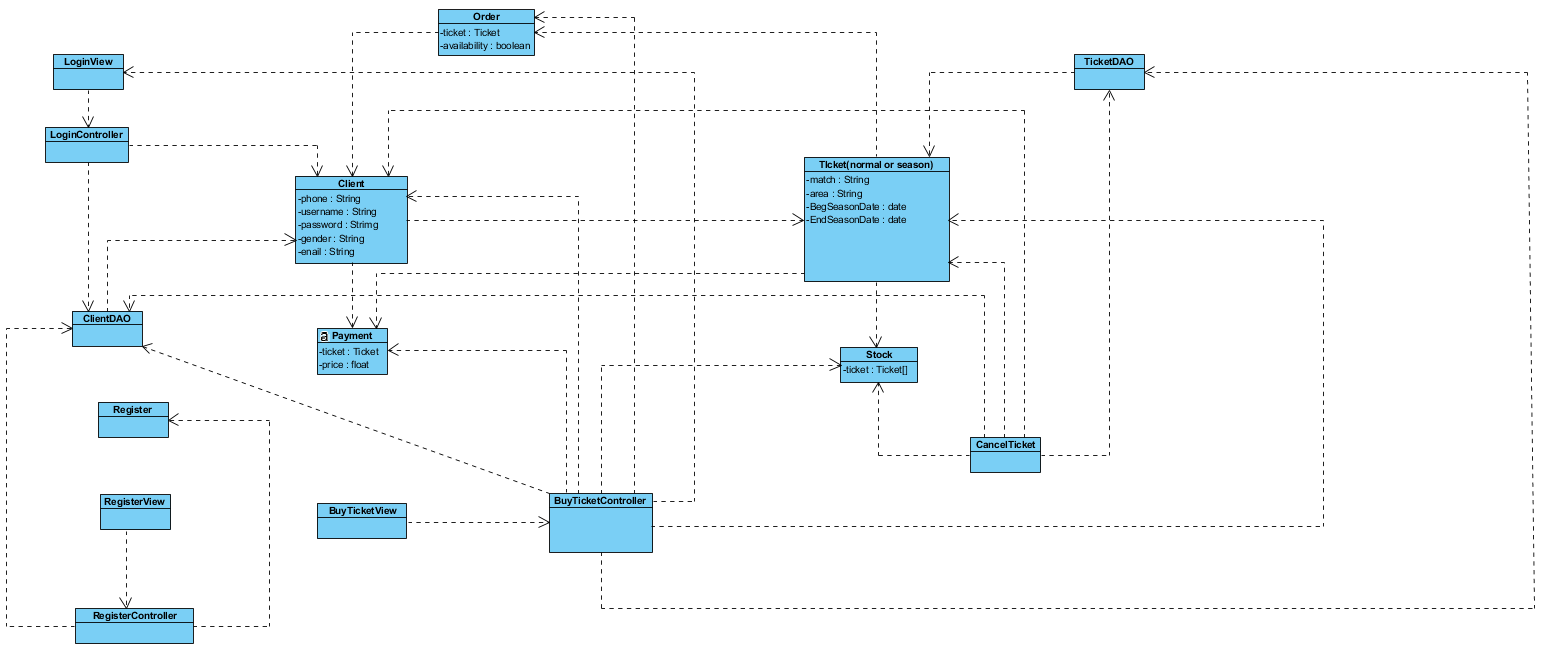
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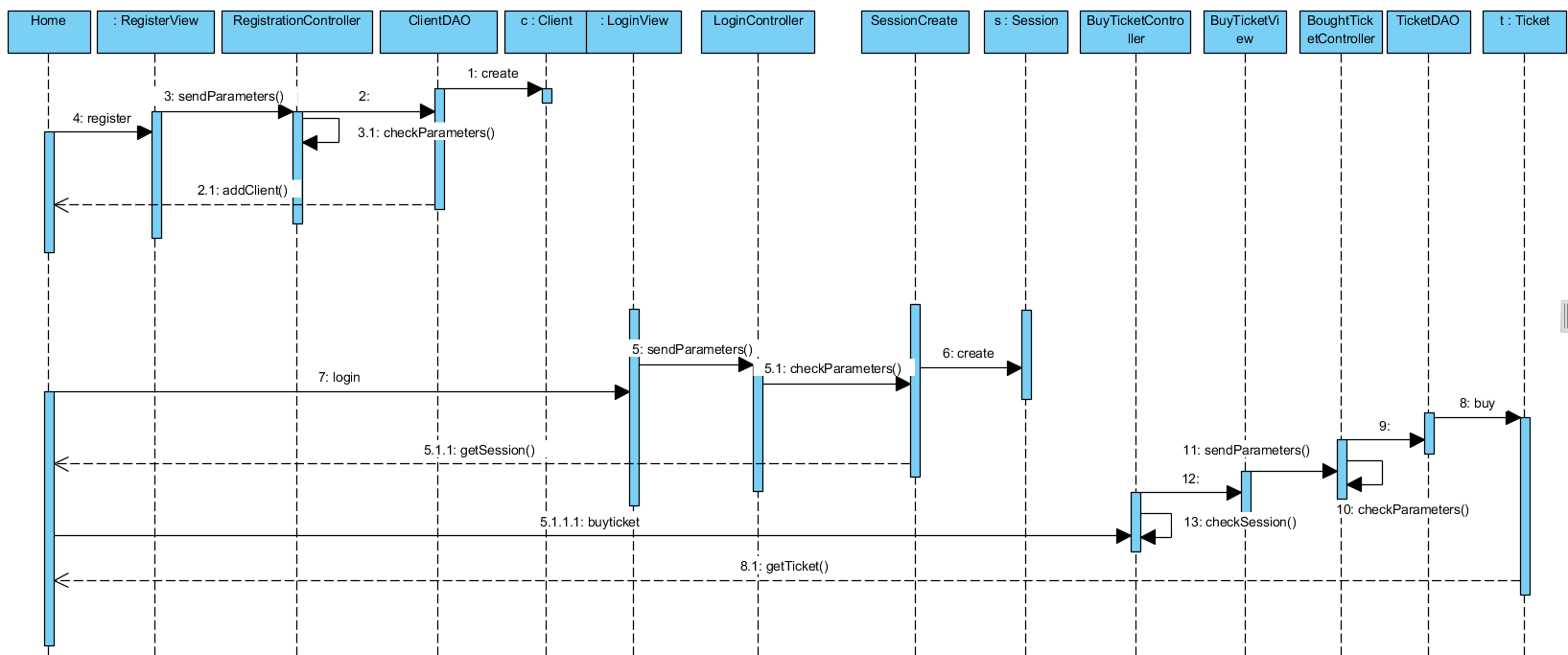
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**Part 3:**

**Design Class Diagram:**

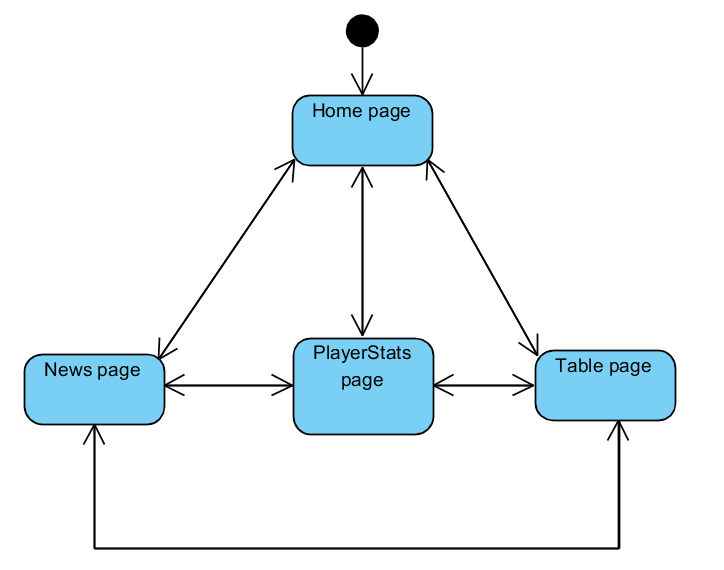
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**Sequence Diagram:**

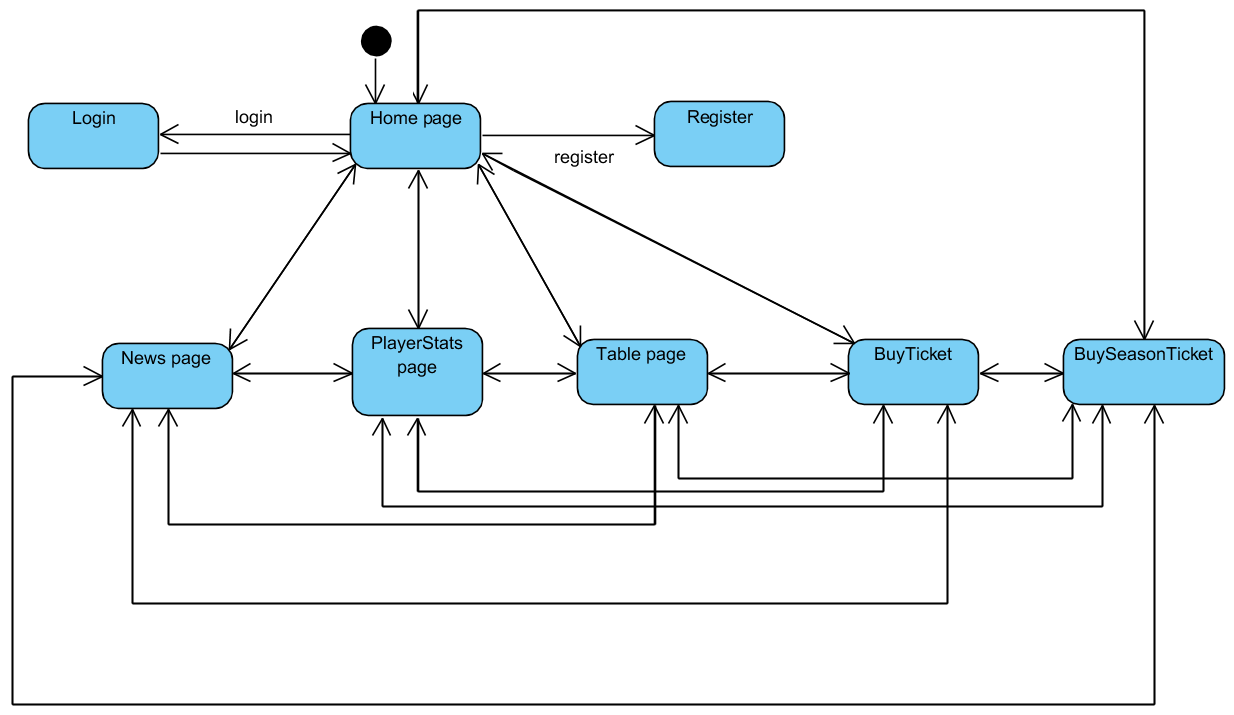
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**Statechart Diagrams:**

**Guest**

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**User:**

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