Project Plan

NBA SEATS

Date	**:**	**Date**
Version	**:**	**Version**
State	**:**	**State**
Author	**:**	**Author**

Version history

Version	Date	Author(s)	Changes	State

Distribution

Version	Date	Receivers

Contents

1. Project assignment

1.1 Context

This is a personal project which suits the interests and hobbies of the person who is going to work on it. It is being worked on for the purpose of learning, improving and personal pleasure.

1.2 Goal of the project

The theme of the project is decided based on personal preference and the fact that it suits the requirements and conditions of the study the person working on it is currently partaking.

Some of the advantages of this project is that the person working on it can improve their skills a lot using completely new technologies for it as well as using external sources with real information and blending them in the project which gives it kind of authenticity that will result in an experience fairly close to a real-life system (like ESPN for example).

The project provides variety of features such as:

- *Login system with different user roles*
- *Stats overview of NBA teams, players, games and seasons*
- *Buying tickets for future NBA games*

1.3 Scope and preconditions

Inside scope:	**Outside scope:**
1 Full stack application for buying tickets for nba games	1 Actual transactions for tickets
2 Login system	2
3 Simulated payment of tickets	3

The applications needs to be a full stack application with RESTful java back end services along with a React front end. The application needs to be finished within a scope of 18 weeks.

1.4 Strategy

The strategy for this project is going to be SCRUM. The work process will be 18 weeks long and will be divided by Sprints that are each consisting of 3 weeks. At each sprint new deliverables will be created and the deliverables of the previous sprint will be revisited and improved.

1.5 Research questions and methodology

The most used research method for this project is going to be Community research . There are many online sources(such as Stack Overflow) where people share their experience in simmilar problems, possible solutions and educational information that will contribute a lot to the completing of this project.

1.6 End products

- **Full stack application:** *A full stack application with spring boot and restful services in the back end and react used for the front end.*
- **Project plan:** *Document describing the stakeholders, project goals and deliverables and the work process*

1.7 User stories

Users

US01: *As a user I need to be able to create an account so I can log in to the website*
Acceptance criteria:

1. *Registration option is available*
2. *Form with relevant for the registration information is displayed*
3. *Text area for email is displayed*
4. *Text area for password is displayed*
5. *Text area for repeated password is displayed*

US02: *As a user I need to be able to log in to my account so I can buy tickets*
Acceptance criteria:

1. *Login option is available*
2. *Form with relevant for the logging in information is displayed*
3. *Text area for email is displayed*
4. *Text area for password is displayed*

US03: *As a user I want to be able to see scheduled games so I can choose which one I want to go to.*

Acceptance criteria:

1. *Date of game is displayed*
2. *Time of game is displayed*
3. *Teams playing in the game are displayed*
4. *Ticket prices are displayed*
5. *Ticket prices are not displayed for games with past dates*

US04: *As a user I want to see the prices of different tickets so I can decide which one to buy.*

Acceptance criteria:

1. *Prices of tickets are displayed*
2. *Prices of tickets are calculated*
3. *Ticket prices are not displayed for games with past dates*
4. *Ticket prices only for the current game are displayed*

US05: *As a user I want to be able to see the players of the teams so I know what game I am going to be watching.*

Acceptance criteria:

1. *Team of players is displayed*
2. *Names of players are displayed*
3. *Position of players is displayed*
4. *Height of players is displayed*
5. *Weight of players is displayed*

US06: *As a user I want to be able to see statistics for players so I know how good the players of the game I want to see are.*

Acceptance criteria:

1. *Points per game of players is displayed*
2. *Rebounds per game of players is displayed*
3. *Assists per game of players is displayed*
4. *Number of games played are displayed for a player*

US07: *As a user I want to be able to see my own information so that I can change it if necessary.*

Acceptance criteria:

1. *Email is displayed*
2. *Email can be changed*
3. *New password can be requested*

Administrator

US08: *As an administrator I want to be able to see history of purchased tickets for a user so that I know how active a user is.*

Acceptance criteria:

1. *History of purchased tickets are displayed for a user*

US09: *As an administrator I want to be able to see history of purchased tickets for a team so I know which team sells the most tickets*

Acceptance criteria:

1. *History of purchased tickets are displayed for a team*

US10: *As an administrator I want to be able to adjust tickets prices so that the price can correspond to the actual places taken.*

Acceptance criteria:

1. *Prices of tickets are displayed*
2. *Prices of tickets are calculated*
3. *Base price of tickets can be adjusted*

US11: *As an administrator I want to be able to add promocodes so that users can buy tickets on more affordable prices.*

Acceptance criteria:

1. *Text are for a promocode is displayed*
2. *Option to add a promocode is available*
3. *Option to remove a promocode is available*

2. Project organisation

2.1 Stakeholders and team members

<<Indicate all stakeholders and team members for your project. For each stakeholder indicate the role for your project. Note that the role that a person has for your project is different from the function the person has. E.g., someone with the function "department manager of department X" can have the role of product owner for your project.

Name	Abbreviation	Role and functions	Availability
Nikola Stankov, 453582@fontys.student.nl	*MR*	*Developer*	*Available for 3 days of the week every week until the end of the project*
Tim Kurvers	*MR*	*Project Mentor*	
Márcio M. Paixão Dantas	*MR*	*Project Mentor*	

2.2 Communication

<< Indicate the meetings and other channels of communication that you have established, or that you use for your project. Think of communication with all stakeholders including company supervisor, teachers, etc.

In which manner does each communication take place? Think of the goals, the location (or whether it should be online), the timing and frequency, and the attendee list>>

3. Activities and time plan

3.1 Phases of the project

<< Describe the main phases of your project. Even in a scrum project, you should specify at least the components at the beginning and end phases like problem analysis in the beginning, as well as handover, evaluation, reflection, and wrap up at the end.

For internship projects, reserve sufficient time for developing/maintaining the portfolio/thesis.
>>.

3.2 Time plan and milestones

<< For a waterfall project you can indicate the phases and milestones below (can be adapted as required).

For an agile project, describe how the artefacts are planned. E.g., length of sprint (with justification), organization of stand up, demo, retrospective.
>>

Phasing	Effort	Start date	Finish date
1			
2			
3			

4. Testing strategy and configuration management

4.1 Testing strategy

<<Which testing strategy do you envision? E.g., on which levels will testing take place? Consider that you could choose unit, component, integration, system, or acceptance testing.

Justify your strategy, and also set goals where relevant. E.g., percentage code coverage for the relevant unit tests. For each of the planned tests, indicate what will be automated and what not.

Also think of quality testing setups like, e.g., Sonarqube.
>>

4.2 Test environment and required resources

<< Describe the test environment. E.g., do you envision a DTAP (Development, Testing, Acceptance, Production) environment. Can you make use of a CI/CD environment or will you develop your own?

It often helps to use a picture to visualize the test environment.

If you already know, describe which resources are required for realization and testing. Think of hardware, cloud environments and specific tooling required for development and testing.
>>

4.3 Configuration management

<< Describe the project approach with respect to version management (e.g. your GIT repository). This might include things like tooling, branching strategy, promotion-, release- and baseline strategy.

Also, when relevant, think of a mechanism to deal with change requests and problem reports.>>

5. Finances and risk

5.1 Project budget

<< If specific budget is required for your project, indicate it here, and also what needs to be done to get budget approval. Think of hardware, applications, libraries, development environments, etc.

Regular costs that have already been covered, like an internship compensation, do not need to mentioned.
>>

5.2 Risk and mitigation

<< Investigate and define all risks affecting the project. For each risk indicate what has been done, or will be done during the project, to prevent the risk from being actualized, and define the mitigation actions, such as what you plan to do if the risk actually eventuates. Think both from an organizational perspective about risks (e.g. sudden unavailability of the company mentor) and also from a content perspective (e.g. what happens if your research shows that it is a better to purchase an application than to develop it as a major part of your internship).

In a more elaborate version, you can also label the risks with their chance of occurrence and impact. The advice is to focus on risks that have both a real chance of eventuating and some considerable impact. Direct risks, like what to do if your company supervisor is not available anymore, should always be described, as they have happened in the past quiet regularly.
>>

Risk	Prevention activities	Mitigation activities
1		
2		
3		