**Project Plan**

**Grand Slam Chronicles**

Client: Tennis Titans

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| **Date : 11 February 2023** |
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| **Author : Matei-Andrei Alexandru** |

#### Version history

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| 1.0 | 11/02/2023 | **Matei-Andrei Alexandru** | Document’s main structure and content | Finished |
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# Project assignment

## Context

Tennis Titans are a newly built tennis club in the bustling city of Eindhoven. The club quickly gained popularity, attracting professionals and aspiring juniors from all over the world. The founders were determined to enhance the club’s member experience to the best it could get. The club grew fast, by adding new courts. It quickly became known as a hub of tennis activity in the city. As a modern sports club with a lot of members they are facing difficulties in keeping track of their members, tournaments and matches. They would like a software solution to help them with these problems that they are currently facing.

## Goal of the project

The project’s goal is to develop a bug-free and reliable system for solving the problems Tennis Titans club are facing such as keeping track of their members, tournaments, matches and member rankings. These are just some of the problems I aim to solve with the solution I will be implementing. There are many advantages for the club in using this solution for example, the club manager won’t have to use paper to draw tournament matchups and rankings anymore. This project makes the Tennis Titans club more valuable as employees can focus on more important tasks like maintaining the courts rather than searching for papers and documents.

## Scope and preconditions

|  |  |
| --- | --- |
| **Inside scope:** | **Outside scope:** |
| 1. Manage match highlights | 1. There will be no training on how to use the software solution. |
| 1. Manage members | 1. There will be no updates after the solution’s final version has been agreed on and deployed. |
| 1. Manage favourite members | 1. ? |
| 1. See member rankings | 1. ? |
| 1. Search for a member | 1. ? |
| 1. See statistics about matches | 1. ? |
| 1. See statistics about members | 1. ? |

## Strategy

For this project I will be working using the Agile SCRUM methodology. By using this iterative methodology framework, it is required to work in small cycles, each of them bringing improvements to the product. I believe that, with this project management method I can meet with the client more often thus getting more feedback on the current project status and requirements. Knowing the client’s opinion every time is very important as a developer and that is why I chose this project management method over the waterfall method. For keeping evidence of the tasks and their status I will be using a tool called Trello.

## Research questions and methodology

For this project I will be using a stack of languages from the java family such as java, java script and react. I will also be using a couple of frameworks like Springboot. Furthermore, I will choose Hibernate as an ORM, sonarQube as a code analyser and Docker as a tool for deploying the project.

## End products\*

Chart

Description automatically generated

# Project organisation

## Stakeholders and team members

If needed I can be contacted via email at (a.alexandru@student.fontys.nl) or if the matter is more urgent, I am waiting for your message on Microsoft Teams. Tech teachers can be added here!

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Abbreviation** | **Role and functions** | **Availability** |
| Matei-Andrei Alexandru | MAA | Main developer of the project | I am available from Monday to Sunday. Working times: 7:00-12:00 and 13:00-24:00 |

# Activities and time plan

## Phases of the project

For this project I will be using the AGILE scrum methodology. I will be taking a complete approach on following this framework’s instructions. That being said, each of my sprints will consist of the following steps:

* Analysis of the requirements.
* Update product backlog.
* Plan the sprint.
* Design sprint backlog.
* Implementing the sprint backlog.
* Test the sprint results.
* Deploy the result of the sprint.
* Sprint review.
* Sprint retrospective.

## Time plan and milestones

For this project I will be working in six sprints, each of them consisting of three weeks. \*Effort will be represented on a scale ranging from ten to one hundred, ten representing the least amount of effort and one hundred representing the highest amount of effort. Add only sprint name and a one-word description: ex: Sprint 1 backend and see details in Trello.

|  |  |  |  |
| --- | --- | --- | --- |
| **Phasing** | **Effort\*** | **Start date** | **Finish date** |
| 1. Analysis of the requirements | 60 | 13/02/2023 | 14/02/2023 |
| 1. Product backlog v1.0 | 40 | 14/02/2023 | 16/02/2023 |
| 1. First sprint’s planning | 50 | 16/02/2023 | 17/02/2023 |
| 1. Sprint backlog | 40 | 17/02/2023 | 17/02/2023 |
| 1. Daily SCRUM | 80-90 | 17/02/2023 | 27/02/2023 |
| 1. Test the sprint results | 50 | 27/02/2023 | 28/02/2023 |
| 1. Deploy sprint results | 20 | 28/02/2023 | 28/02/2023 |
| 1. Sprint review | 55 | 01/03/2023 | 01/03/2023 |
| 1. Sprint retrospective | 30 | 02/03/2023 | 02/03/2023 |

# Testing strategy and configuration management ----Not complete because of lack of information----

## 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.*

*>>*

## 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.*

*>>*

## 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.>>*

# Risks

## Risk and mitigation

|  |  |  |  |
| --- | --- | --- | --- |
| **Risk** | **Prevention activities** | **Mitigation activities** | **Probability** |
| 1. Scope Creep | Create a very clear project plan and scope | Cut on the features that are outside of the project scope | Medium |
| 1. Team Burnout | Work in a controlled and scheduled manner | Take breaks when feeling too tired | Medium |
| 1. Misaligned expectations | Get a clear view of what the client wants every time before starting a new sprint | Rediscuss requirements with the client and start sprint again. | Low |
| 1. Inadequate testing | Test the product after every feature has been finished, as well as at the end of every sprint | Fix the problem as soon as possible | Medium |
| 1. Lack of documentation\* | Make sure that documentation is up to date with the latest software version | Update the documentation as soon as possible | Low |
| 1. Dependency\* management | Make sure that all technologies are compatible when starting to work on a project | Find the quickest way to get to a stack of compatible technologies for the project | Medium |
| 1. Technical Debt\* | Make sure that thorough software development principles are applied when implementing your application | Analyze the code and fix the found flows in it. After this step make sure that all tests are passing and the solution is functioning as planned. | Low |
| 1. Individual track tutor unavailable | Communicate often with the tutor so that there is time to prepare if this occurs | Find a replacement teacher/person with similar expertise to answer questions | Medium |