Research document

Contents

Introduction

In his document we will introduce the tools that we use and the reason as to why we use them.

Tools

Java

In this semester we will study Java thoroughly. We immediately decided on using that programming language since it will be an excellent practice for us.

Angular

For the frontend we settled on using the Angular framework. Since it is developed by Google, it is more appropriate for the web application we are developing. We also considered using either React or Vue.js, but Angular proved to be the more reliable choice.

Firebase(No-SQL)

For the web application we are currently developing, it is more convenient to use a "No-SQL" database. There is no need for queries and pictures can be added very easily. Firebase is supported by Google and that will make work easier since one part of the project is reliant on Google maps. Also the database is global and not local.

Maven

During the planning we also discussed which project management tool we wanted to use: either Gradle or Maven. We decided that Maven is the option we will go with, because it's purpose is developing pure Java language-based software and is a reliable pair of hands.

Backlog

After doing extensive research and carefully considering the available options, we decided to use Azure DevOps for keeping track of our backlog. At first, we started using the Trello board but after a discussion with our teachers, we decided to switch to our current choice.

One of the main reasons that led to that decision were the more in-depth functionalities of Azure. Trello looks more appealing to the user but can become more limiting as time goes on. Jira is also an option our team considered. The downside of Jira is that it is not user-friendly. Since we are not a very big team of developers, Jira would be a viable option but Azure happens to be the middle ground that provides everything needed for the development.

Another option that was considered was GitHub's issue board. Since it is very similar in terms of functionalities to Azure, it was a matter of personal preference.

In conclusion, Azure DevOps has everything necessary for us. After consulting our teachers, that choice was approved.