

**Project Plan**

**BudgetSimple**

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#### Version history

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| 1.0 | 17.09.2021 | Stela Trencheva | Initial project plan with planning of Sprint 1&2 | Draft |
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Contents

[1. Project assignment 4](#_Toc82779286)

[Context 4](#_Toc82779287)

[Goal of the project 4](#_Toc82779288)

[Constraints 4](#_Toc82779289)

[Strategy 4](#_Toc82779290)

[2. Activities and time plan 5](#_Toc82779291)

[Time plan and milestones 5](#_Toc82779292)

[ Work for the sprint: 6](#_Toc82779293)

[ Work for the sprint: 7](#_Toc82779294)

[3. Finances and risk 8](#_Toc82779295)

[Project budget 8](#_Toc82779296)

[Risk and mitigation 8](#_Toc82779297)

[1. Delays to training impact the project. I try to keep all lessons in sink with the project deliveries. It can happen that some of the required knowledge is missing at the moment you start the delivery and run into some delays. 8](#_Toc82779298)

# Project assignment

## Context

BudgetSimple is a budget application meant to be a convenient way of tracking spending and to simplify people’s needs while collecting everything in one place. The application can be used individually and in a group. Every person can make a registration and login with their credentials. In the application, people can create wallets for different purposes. Every wallet can have a budget and in this way, a user can track how he/she is spending money compared to the budget. In a wallet, people can add transactions holding information of their purchases. Multiple people can use one wallet. This can happen, when a person generate a code for the wallet and share it with others. Then using the code people can join the wallet and share one budget, add transactions, etc. In a wallet with multiple people, the amounts of the transactions can be divided through the members (equally or not) and in this way each member can see how much he/she owes to the others and vice versa. In a wallet, people can see statistics about how much they have spent per periods, categories, per person and in total. Also, depending on the previous months, people can see estimations of how much they might spent in future months. Owner of a wallet can restrict other members so in this way they will not be allowed to do some things like setting a budget. Admins of the application can add bonuses that users can unlock when fulfilling different tasks and admins can track which bonuses are unlocked the most so they can make reports and assumptions on which things are the most used and enjoyed. Users are able to rate the application and share their ideas and opinion. In case of a problem while using the application or a question, people can contact customer support users using the live chat and they can get an answer there if a customer support employee is available.

## Goal of the project

The goal of the project is to create an efficient way that will ease people who want to track their spending while allowing them to access all needed features to track and analyze spending in one place, collecting features from other applications and adding even more. The project is going to be in the form of a website, which can be used on all devices, which makes it simple and comfortable.

**Problem description**

The biggest challenge that the client is facing is having one application that collects their favorite budget tools from multiple applications. They have issues with tracking their spending in an easy way, and having different spending accounts with multiple people.

## Constraints

* Full-stack web application
* Programming language – Java, JS, React
* Sharing code – Gitlab
* Not needed to buy or get external sources to run the project
* Important deadlines for the project – Every 3 weeks (every sprint)
* Number of meetings with the teachers – 4 times each week, which is enough for a sufficient feedback

## Strategy

This project is going to be developed using Agile methodology. This approach was chosen because it allows easy changes on the go and the risk of not delivering a working application is minimized. As the project have many elements, using Agile it will be easier to deliver different working states of the application and analyse how it is going. Jira is going to be used to track tasks, plan and organize as it is one of the best software planning tools for software engineering and testing.

# Activities and time plan

## Time plan and milestones

|  |  |  |
| --- | --- | --- |
| **Phasing** | **Start** | **Finish** |
| 1. Sprint 1 | Week 1 | Week 3 |
| 1. Sprint 2 | Week 4 | Week 6 |
| 1. Sprint 3 | Week 7 | Week 9 |
| 1. Sprint 4 | Week 10 | Week 12 |
| 1. Sprint 5 | Week 13 | Week 15 |
| 1. Spring 6 | Week 16 | Week 18 |

**Sprint 1**

* Work for the sprint:

|  |  |  |  |
| --- | --- | --- | --- |
| **Activity name:** | Start project and documentation | **Delivery date:** | 17.09.2021(Friday) |
| **Input:** N/A | | | | |
| **Budget:**  3 weeks (3 days each) | | | | |
| **Activities:** | | | | |
| * Getting to know Java and Agile methodology * Create a project plan * Create user stories with prioritization, estimation, acceptance criteria * Create a test plan * Create a GIT repository and prepare it for continuous integration * Create the first setup of Restful API | | | | |
| **Outcome:** | | | | |
| * Project plan with Sprint 1&2 planned, versioning table, description of the problem/project, finances and risks * URS document with product backlog containing user stories; data constraints * Test plan document * GIT repository prepared for CI, containing the initial project and documents * Initial project with a Rest API, service layer and data layer, doing some basic GET, POST, PUT operations and including tests for the service layer | | | | |

* Self-check at the end of the sprint – Check the work done / Check the unfinished processes

**Sprint 2**

* Work for the sprint:

|  |  |  |  |
| --- | --- | --- | --- |
| **Activity name:** | Implementation | **Delivery date:** | 08.10.2021(Friday) |
| **Input:** Sprint 1 outcomes | | | | |
| **Budget:**  3 weeks (3 days each) | | | | |
| **Activities:** | | | | |
| * UML diagram * Create a mock up / prototype * User Story 1 - Registration * User Story 2 – Login * Create and connect a real database * Add authentication and authorization * User Story 3 - Wallets * User Story 5 - Transactions * User Story 4 – Wallet budget | | | | |
| **Outcome:** | | | | |
|  | | | | |

* Self-check at the end of the sprint – Check the work done / Check the unfinished processes

# Finances and risk

## Project budget

The budget of the project is represented in time. The whole time in which the project should be finished is 18 weeks. These 18 weeks should be divided in 3 weeks sprints. In each sprint, user stories from the backlog should be done. The user stories should be divided throughout the sprints in a way that they will be finished. If a user story is not done in the end of the sprint, it is added to the backlog and if it is an essential one, it is done in the next sprint, otherwise when there is time left in a particular sprint or at the end. In this way, the budget is divided and spent rationally and it is the least risky way of running out of budget.

## Risk and mitigation

## Delays to training impact the project. I try to keep all lessons in sink with the project deliveries. It can happen that some of the required knowledge is missing at the moment you start the delivery and run into some delays.

1. Lack of management or control. Without a project organization I might run into some problems along the way. Every project has a management or some form of control to run the project smoothly.
2. Scope Variations. If new ideas come on the way, the scope of working may need to change.
3. Not meeting learning outcomes. When developing the project and releasing a new version each new sprint, teachers may want more so that the project meets the outcomes

|  |  |  |  |
| --- | --- | --- | --- |
| **Risk** | **Probability** | **Impact** | **Prevention activities** |
|  | Unlikely | Slightly harmful | Study extra things and not wait for the workshops in order to do something on the project |
|  | Unlikely | Harmful | Organize and plan every spring so that I am sure I am doing the maximum |
|  | Likely | Not harmful | Add the new ideas in the backlog and implement them after everything else in the spring is done so that the plan of the sprint is not disturbed. |
|  | Unlikely | Not harmful | I am previously aware of the outcomes and my plan should consist of tasks that will meet them. However if the teachers want something more, it will be easy to add additional things in the backlog. |