Project plan

Team name: NUMBER UNO

Team members:

- Daniil Shchennikov e2301469
- · Zlata Shabalina e2202761
- · Matti Leväsalmi e2202747

Project Overview

1. Project Name: Hotel room reservation application

2. Project Manager: Matti Leväsalmi

3. Project Sponsor: VAMK

4. Project Description: Create a hotel room reservation application, to provide a simple user-friendly interface for customers.

Scope

- Items in the scope: clients can sign up/sign in to save their data, reserve a hotel room and manage a hotel room reservation. Hotel staff can view and manage reservations and update hotel information.
- 2. **Items outside the scope:** Payment processing features, mobile application development (initial focus on web), third-party integrations (e.g., social media logins), multi-language support (initial release will be in English).
- 3. Assumptions and constraints: lack of budget, tight deadline.

Project expectations:

- Objectives: Create a user-friendly interface for clients to use, secure data so that only those
 with the sufficient permissions have access, an efficient system that ensures a reservation
 takes under a minute to be achieved.
- 2. Major functions: Reserve Room, Manage Room, View Reservation, Encryption
- 3. Performance issues: Database connections can take an excessive amount of time.
- **4. Management and Technical constraints:** High-quality tools(databases, etc.) may be unavailable due to budget.

Project Estimates

- Historical data used for estimates: Insights from similar hotel reservation applications developed in the past.
- **2. Estimation techniques:** Expert judgment from the teacher. Estimation based on similar past projects.
- 3. Estimates: 3 team members, 0 \$ budget and about 2 months of development.

Project Risks

- 1. Risk analysis: Unforeseen technical difficulties during development which may delay progress past the deadline, team members may become unavailable during the project (get ill).
- 2. Risk management: Plan the schedule so that there is extra time for unexpected technical challenges. Work will be divided equally between members so the project can progress even if a member becomes ill or is otherwise unavailable.

Communication Plan

Stakeholders: Zlata Shabalina, Matti Leväsalmi, Daniil Shchennikov

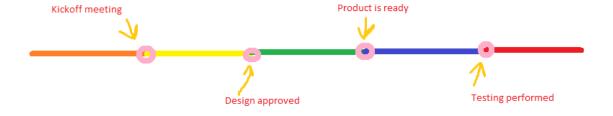
- **2. Communication methods:** Communication is largely done through face-to-face meetings and by text and email as needed.
- **3.** Communication Schedule: Weekly meetings to discuss progress, future plans for development, and any issues that have arisen.

Schedule

1. Project work breakdown structure:

| Project Management | Designing | Backend Development | Frontend Development | Testing |
|-----------------------|---------------------------|------------------------|--|------------------------|
| Requirement gathering | UI Design | API Development | Breaking down UI design into React components | UnitTesting |
| Requirement analysis | Database Configuration | Authentication system | Responsive Design (Mobile-first) | Integration Testing |
| Risk analysis | Prototyping | Security Measures | API Integration | Acceptance Testing |

2. Task network and milestones:



3. Timeline chart:

| | Α | В | С | D | E | |
|---|----------------|----------|-----------|----------|---------|--|
| 1 | | Oct 1-15 | Oct 16-31 | Nov 1-30 | Dec 1-4 | |
| 2 | Planning | | | | | |
| 3 | Design | | | | | |
| 4 | Implementation | | | | | |
| 5 | Testing | | | | | |
| 6 | | | | | | |

Project Resources

- 1. Team members: Zlata Shabalina, Matti Leväsalmi, Daniil Shchennikov
- 2. **Resource allocation:** because everyone brings the same impact in this project all the resource are allocated evenly (Zlata 200,000; Matti 200,000; Daniil 200,000)
- **3. Tools and technology:** Google Tools (Google Docs and others), Azure DevOps, GitHub, React JS(Bootstrap + MUI), Node JS, MySQL
- 4. Budget: €600,000

Staff organization

- **1. Team structure:** A self-organizing team consisting of three members, who share responsibility in developing the application.
- 2. Management reporting: Project status and operational efficiency will be discussed during planned meetings and used to make decisions on how to further organize our team and project in an efficient way.

Tracking and Control mechanisms

1. **Decision-making structure:** during the project the decisions are made through the project board.

- 2. **Issue management:** the possible project issues and conflicts are solved through communication in the team until the team comes up with the solution that all the team members agree with.
- **3. Progress monitoring:** the progress of the project is measured through regular meetings and discussions, the progress can also be monitored online (for example using the Azure DevOps project board).
- **4. Key performance indicators:** timely transition from one project task to the next one makes sure that the project meets the deadline, each team member does the assigned task on time, the project meets the customer's requirements.