МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ  
РОССИЙСКОЙ ФЕДЕРАЦИИ

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**Отчет по лабораторной работе №1**

Дисциплина: «Project Management   
(Менеджмент разработки ПО)»

Тема: **«Application»**

Выполнил: Софронов С.Д.

Группа: 6233-010402D

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**ЗАДАНИЕ**

* To come up with a project. Imagine that this is an application for an investor who needs to be persuaded of the success of the project. Project should have some scientific part. Duration of the project is not more than 2 years (before reaching financial self-sufficiency). The budget of the project is not more than $30 000.
* To make application, send it for verification

**Application contains the following info:**

1. Author's first, last name
2. Project name
3. Project scientific part

3.1 Scientific objectives of the project

3.2 Scientific novelty of the project

1. Project commercial part

4.1 Project results application, potential consumers

4.2 Existing analogs, competitors

4.3 Implementation plan by stages, time to implement, cost

**ХОД РАБОТЫ**

1. Author's first, last name

Semyon Sofronov

2. Project name

Development of service for reconstruction of images of a mobile hyper spectrometer based on data of visual inertial odometry

3. Project scientific part

3.1 Scientific objectives of the project

The aim of the project is to create an application for carrying out spectral analysis of the surface of objects with the detection of defects. To implement this application, it is necessary to extract data on the movement of the device in space, as well as to process the data obtained by the method of visual inertial odometry.

3.2 Scientific novelty of the project

Currently, there are many methods and implementations of visual odometry. But this project implements its use specifically for the spectral analysis of the surfaces of objects.

4. Project commercial part

4.1 Project results application, potential consumers

The application will be useful for engineers involved in checking the conditions of various objects. For example, for examining the hull plating of ships, airplanes, cars, for detecting defects of walls and supporting structures of buildings.

4.2 Existing analogs, competitors

Currently, outdated methods and devices are used for such cases. For example, ultrasound.

4.3 Implementation plan by stages, time to implement, cost

**First stage:** research, technology analysis, search, collect and data analysis. 2 months.

Number of employees, skills: 2 employees, analytical skills.

2 employees, 5 days/week, 8 weeks, 8 hours, $4/hour => 2\*5\*8\*8\*4 = $2560

Stage budget: $2560

**Second stage:** implementation of spectral analysis based on the data of visual inertial odometry. 6 months.

Number of employees, skills: 2 employees, spectral analysis and visual inertial odometry skills.

2 employees, 5 days/week, 24 weeks, 8 hours, $7/hour => 2\*5\*24 \*8\*7 = $13440

Stage budget: $13440

**Third stage:** Development of a mobile application and server. 4 months.

Number of employees, skills: 2 employees, Software engineers, mobile development experience.

2 employees, 5 days/week, 16 weeks, 8 hours, $7/hour => 2\*5\*16\*8\*7 = $8960

Stage budget: $8960

**Fourth stage:** testing, fixing bugs. 3 months.

Number of employees, skills: 2 employees, QA engineer, Software engineer.

2 employees, 5 days/week, 12 weeks, 8 hours, $4/hour => 2\*5\*12\*8\*4 = $4608

Stage budget: $5760

Total time duration: 15 months

$2560+$13440+$8960+$4608---->

Total budget: $29568

**ЗАКЛЮЧЕНИЕ**

In this assignment I came up with a project, that meets the requirements of having scientific part, duration of the project is not more than 2 years and the budget of the project is not more than $30 000.