Fontys
University of Applied Sciences

Trafic Control System
Project Plan

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1 Introduction

The purpose of this document is to describe the overview of the given project. We, 4Cube, will elaborate the project in details, such as: who the formal client is, their goals, what we will provide to satisfy their requirements and also what we are not obliged to deliver of the client. // In addition we will discus in details the project management such as the cost, time, personnel involved, etc.

2 Project Statement

2.1 Formal Client

The formal client of this project is Mr.George.
He works in the city of CSharp, in which he is mainly responsible for the traffic situation.
Our formal client, Mr. George contracted us via his acquittance Mr Peter Massen and Mr. Peter Boots who are both teachers of Fontys.

2.2 Project Leader

Agnes Wadee, a Software Engineering student in class Ei7s2, of Fontys University of Applied Sciences will be the project leader.
The project leader represents a group of Software Engineering students: 4Cube.

2.3 Current Situation

In the past few years, the city of CSharp has endured a lot of traffic accidents. The traffic is poorly managed, and therefore, our client, Mr. George aims to place some traffic lights in order to reduce the impact positively in the society by reducing the occurrence of traffic accidents on the roads.
Based on the overview received from the client about the project, we made a few assumptions. CSharp is a large city with a huge population.
There is currently a non-existing application or an existing application which isn't functioning well, in order to assist Mr. George in his tasks.

2.4 Project Justification

The idea of just placing traffic lights on the roads without investigating the impact is not optimal. This is the main reason why Mr. George wants to investigate whether these traffic lights will cause a lot of traffic jams. The main aim of the project is to make a traffic simulation application. We are aware of the goals of our client, which are as follows:

- Mr. George aims to reduce the number of traffic accidents on the roads.

- Also, with this application, it will ensure good traffic management by reducing traffic jams.

2.5 Project Product

The goal of 4Cube Developers is to plan, design and implement an application to emulate traffic. The application will be used to investigate the effectiveness of the traffic lights to be placed on the actual roads.
It will also help reduce traffic jams as an after effect of placing the traffic lights, since our application will provide those details during simulation.

2.6 Project deliverables and non deliverables

In this project we will deliver:

- A tested and working traffic simulation application.

- The source will also be a deliverable

- A user manual which outlines the features of the application and guidelines for the user.

- A Project Plan

- User Requirements Specification Document which outlines the technical requirements of the project.

- A Design Document which will give an overview of the design of the software.

- A Test Plan which elaborates on the tests we have made throughout the application.

- A final Presentation about the project.

Unfortunately, we will not deliver the following:

- There will be no training organised for the users of the application.

- There will be no seminars or talks about the use of the application.

- For presentation purposes only, exemplary data will be used, but the client is responsible for the implementation of the actual data.

- Disclaimer: It is not our responsibility to handle the consequential damages as a result of using this application.

2.7 Project Constraints

Language
The language constraint on this project is `C#`.
The language of the software will be in English.

Operating System
The software should run on a computer with Windows running the latest .NET Framework. If the computer runs on Mac OS X, Linux or *BSD, we recommend a Windows virtual machine.

Usability

This application will be a single user application. Multiple users cannot operate with the software at the same time.

Time
The project has to be completed within 14 weeks.

2.8 Project Risks

Table 1: Risks Outline.

Risk	Alternative Scenario
Risk of not being able to complete before the deadline	Check schedules regularly to ensure we are on schedule.
Occurrence of application errors	We will test our devices beforehand to avoid any of these occurrences.
Risk of insufficient financial budget	We will ensure to make a good estimate at the start in order to avoid this.
Risk of application being illegally hacked	We will find the vulnerability and fix it
Use of legacy software poses a risk since the implementation could be difficult	Ensure we receive a clear explanation about the legacy software.