ProCP  
Traffic Control

Project Plan

Course: ProCP

Date: 17 September 2015

Group: 3

Group Name:

Students:

Mikaeil Shaghelani Lor

Mervin Vrolijk

Bolarinwa Iruemiobe

Nibras Shawy

Tarwiya Al Ismaili

Version: 2.0.0

Table of Contents

[Project Statement 3](#_Toc429647730)

[Formal Client 3](#_Toc429647731)

[Project Leader 3](#_Toc429647732)

[Project Justification 3](#_Toc429647733)

[Project Product 3](#_Toc429647734)

[Project Deliverables and Non-deliverables 3](#_Toc429647735)

[Project Constraints 4](#_Toc429647736)

[Project Risks 4](#_Toc429647737)

[Project Phasing 5](#_Toc429647738)

[Money 6](#_Toc429647739)

[Skills: 6](#_Toc429647740)

[Quality: 7](#_Toc429647741)

[Information 7](#_Toc429647742)

[Time 7](#_Toc429647743)

[Organization 9](#_Toc429647744)

# Project Statement

## Formal Client

Mr. George who is working for the city of Csharp, he is responsible for the traffic situation.

## Project Leader

The leader of this project will be Mikaeil Shaghelani. Mikaeil is currently a student at Fontys University of Applied Sciences in the ICT department.

This team consists of five people Mikaeil Shaghelani, Mervin Vrolijk, Tarwiya Al Ismaili, Bolarinwa Iruemiobe and Nibras Shawy. All of them students of Fontys University.

**Current situation**

There is an increased number of car accidents in the city because there are no traffic lights at the moment. Therefore Mr. George hired us to help him with this by developing a traffic simulation software.

## Project Justification

In order to reduce the number of accidents happening and improve the safety in the city we are going to make a decent traffic light simulation system.

## Project Product

The product will be a traffic simulation software that will help the Mr. George visualize real time traffic in the city in order to reduce the number of accidents. In the application the user can simulate different traffic situations with help of the tools provided.

## Project Deliverables and Non-deliverables

**Deliverables:**

* Simulation software (Source code and Executable)
* Presentation
* Project Plan
* URS( User Requirements Specification)
* DD (Design Document)
* TP (Test Plan)
* Prototype
* User manual

**Non-deliverables:**

* Training for the use of the application.
* Any other services or hardware that the software needs.

## Project Constraints

***C# Programming Language:***

C# is the programming language to be used in our windows applications since it’s a really good example of an object-oriented programming language. It will be used for windows form applications.

***Operation System:***

We are using visual studio as an IDE therefore our product will be limited to the windows OS.

# Project Risks

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Risk | Probability | Impact | Risk Prevention | Solution |
| Falling behind deadline. | Medium | High | Assign more time that is esteemed to be necessary for the activity. (Adding “buffer” time.) | Reassign task to the group members. Give additional work to idle members. |
| The prototype may not give the expected results. | Low | High | Try to have a clear view of the client’s expectation. | Having different meetings showing him the prototype to get his feedback on this. |
| File loss and corruption. | Low | High | Using a reliable file repository. | Having a backup. |

# Project Phasing

*Week 19*

*Week 11-14*

*Week 15-18*

*Week 1-4*

*Week 5-8*

Start with software design.

Testing prototype (software)

Working on project plan’s draft.

Start coding for prototype.

Present the product.

Preparing the final version of presentation.

Assessment of URS and test plan.

Working on the URS’s first version.

Writing the user manual.

Working on the test plan’s first version.

***M5***

***M4***

***M3***

***M2***

***M1***

Deliverables for milestone **M1**:

* Handing in primary project plan and final one.
* Hand in first version of test plan.
* The first version of the URS.

Deliverables for milestone **M2**

* Hand in final URS.
* Hand in final test plan.

Deliverables for milestone **M3**:

* Hand in final DD.
* Hand in the first prototype.

Deliverables for milestone **M4**:

* Hand in final prototype.
* Hand in user manual.

Deliverables for milestone **M5**:

* A presentation of the product.

## Money

1. Expenses:

* Human Resources:
* Developer(Per person) € 1000 \* 5
* Maintenance(Per month) € 300
* Programming:
* Design € 1000
* Programming € 5000
* Implementation € 4000
* Testing:
* Test environment setup € 500
* Test effort € 200
* Support:
* User Manual € 500

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Total initial cost: € 16200

2. Profit:

* Doesn’t need to hire additional personnel.
* Fewer accidents.
* Save lives.

3. Additional benefits:

* Can be reused in the whole world.
* Efficient applications.
* Backed-up software.

## Skills:

In this project we need and we can help to improve following skills:

* Communication skills.-We will need this skill to correspond between the team members. The better communication we have the less likely is that misunderstanding will occur. We will need this skill during the whole duration of the project.
* Project leader skills.-We will need a solid connection between the client and the group so that information regarding the needs of the client can be layout as best as can.
* Programming skills.-We will need this skill to create the necessary application needed for this simulation software.
* Testing skills.- We will need this skill to test the software.

## Quality:

***Quality constrains:***

* Interactive and easy to use interface.
* The application we will provide will have no performance issues when provided with a large number of commands.
* The applications will not have unexpected breakdowns during usage.
* The software will not give out incorrect or invalid information.
* The application will be user friendly.

## Information

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Project Plan | Prototype | GUI | URS | DD | Presentation | User manual |
| Project Leader | A,Di,S,Dr | A,Di,S | A,Di,S,Dr | A,Di,S | A,Di,S | A,Di,S | A,Di,S |
| Client | R,A,Di | A,Di,R | R,A,Di | R,A | R,A | R | R |
| Tutor | R,A,Di | Di,R | Di,R | R,A,Di | R,A,Di | R,A,Di | Di,R,A |
| Project team | Dr,Di,Ar | Dr,Di,Ar | Di,Dr,Ar | Di, Ar, Dr | Dr, Ar, Di | Dr, Ar, Di | Dr, Ar, Di |

*(Dr=Draw up, Di=discuss, A=Approve, R=receive/read, S=Send, Ar=Archive)*

## Time

Week 1 to 4

* Finalizing the Project plan will need 3 weeks.
* Test plan will need one week working.
* First version of URS will need one week to work on

Week 5 & 8

* This 3 weeks are the time for last revision on URS, Test Plan and DD. This is the time of decision making and all our documents will be finalized.

BLOCK 2---------Week 11 to 14

* This is the time for start the design and coding in order to achieve the first prototype.

Week 15 & 18

* The prototypes will be tested till we achieve the first stable prototype to show to our client.
* Then we start with User’s manual.
* And then making a presentation that fully fill the feature of our application and also our client’s expectations.

Week 19

* Present the product to the client.

The total time will be 19 weeks.

# Organization

Testing manager

Bolarinwa

Design manager

Tarwiya

Quality manager

Nibras

Programming manager

Mervin Vrolijk

Project Leader

(Mikaeil Shaghelani)

Client

(Mr.George)

Tutor

(Ms.Maja)