Rural Cultivation and Atmospheric Emulation Application (RCAEA)

**Rural Cultivation and Atmospheric Emulation Application**

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INTRODUCTION

Purpose of Plan

The RCAEA Project Plan will provide a definition of the project, including the project’s goals and objectives. Additionally, the Plan will serve as an agreement between the following parties: Project Sponsor, Project Manager, Project Team, and other personnel associated with and/or affected by the project.

**The Project Plan defines the following:**

* Project purpose
* Project statement
* Business and project goals and objectives
* Management plan
* Risk assessment
* Roles and responsibilities
* Assumptions and constraints

Project Approach

In this project we will focus on specific phases for achievement of goals. Below are the important phases as follows:

Phase I: Project plan

Phase II: User requirement specifications

Phase III: Testplan+Testcases

Phase IV: Design document

Phase V: Codes

PROJECT STATEMENT

Formal Client

A representative from SIM Software’s board of management, Mr. Johnson has decided to meet with Tanks & Co™ to consider their RCAEA project submission.

Project Leader

This project will be done in 18 weeks, Richard Dyer is leading our project. He will work amicably with the formal client to meet and/or exceed their requirements. The project leader will be responsible for chairing the meeting with Mr. Johnson, and the communication between and within the project participants with Mr. Johnson.

Current Situation

SIM Software Inc. is interested in adopting simulation applications and has asked for project proposals. Tanks & Co™ has a simulation proposal and will meet with A representative from SIM Software’s board of management, Mr. Johnson and come up with an application in the span of 18 weeks. Mr. Johnson will be the mediator and ultimately make the decision if SIM Software will consider Tanks & Co’s RCAEA software.

Project Justification

The project was initiated by Tanks & Co.™ for agricultural workers to simulate cultivating specific crops in an area of land during a certain length of time. An agricultural planner would be able to use RCAEA in order to determine when, where, and what crops to place in a specified piece of land.

Project Product

RCAEA emulates a certain area of land based on real land data. It considers regions factors such as weather, and soil properties whereby the user can select which outdoor agricultural crops to place in an area. The simulation will use real data on the crop and emulate its growth based one external and internal determinate factors, for example the crop will not grow if the soil has been exhausted from previous use. RCAEA will take all these factors into account and determine an estimated cost and production outcome. Data will be saved in a file which the user can load or keep for their own records.

Project deliverables and non-deliverables

**Deliverables:**

* Minutes
* Agenda
* Project plan
* User requirements specification
* Design
* Test plan
* Test cases
* Working application
* Process report
* Presentation
* User-Manuel

**Non-deliverables:**

* Verbal-Progress Meeting
* Verbal-Question And Answer Meeting

CONSTRAINS

Project constrains

Given below are constrains of project:

* The entire project will be delivered in week 18, following project plan.
* The application will be created in C# Visual Studio.

PROJECT RISK ASSESSMENT

Risk Assessment

| **Risk** | **Risk Level**  **L**ow**/M**edium**/H**igh | **Likelihood of Event** | **Counter measure** |
| --- | --- | --- | --- |
| **Project Size** |  |  |  |
| Behind Project Schedule | **L:** Team is behind project plan schedule | **Unlikely** | Created comprehensive project timeline with frequent baseline reviews |
| **Project Staffing** |  |  |  |
| Absence of team leader | **L:** N/A | **Likely** | Other team member will manage responsibilities of leader. |
| Absence of Minute keeper | **L:** N/A | **Likely** | Project leader will keep minutes |
| Absence of Contact person | **L:** N/A | **Likely** | Project leader will contact client |
| Physical Location of Team prevents effective management | **M:** Team is dispersed among several sites | **Likely** | Use of good communicational plan. |
| Weak User Participation on Project Team | **L:** Users are part-time team members | **Unlikely** | User Group Participants coordinated by full time employee |
| Team’s Lack of Knowledge of Package | **M:** Conceptual misunderstanding | **Somewhat likely** | Team will help those members. |

GOALS AND OBJECTIVES

Business Goals and Objectives

The business goals and objectives for this project are following:

* A simulation will be designed for the farming situation.
* Increases potential profits by calculating potential costs and crop yields.
* Is easy to use.

Project Goals and Objectives

Project goals and objectives:

* Accomplish project business goals and objectives within defined budget and time parameters.
* Make project plan for software project
* Make use cases
* Make nonfunctional requirements.
* Make test plan consisting of test cases.
* Make a design consisting of a class diagram and a few sequence diagrams.
* Design an application that will simulate possible farming cases.

MANAGEMENT PLAN

Money

The Mr. Johnson requested assistance from his friend Mr. Andre Postma who is working as a teacher in the ICT department in Fontys to make Rural Cultivation and Atmospheric Emulation Application. The design budget will initially be covered by Tanks & Co™, and should SIM Software decide to approve and purchase the project, the costs to buy the application will be discussed further.

Skills

* Project Management
* Programming skills
* Testing Skills
* Risk Management
* Database Administration
* Quality Management
* Business case writing
* Administrative / Secretarial Skills
* Scheduling

Test Plan

The test plan will be created to communicate the testing methods of team members. Which includes:

* Test objectives,
* Test scope,
* Test schedule,
* Test risks,
* Test approach,
* Test deliverables

The test plan will clearly identify what the test deliverables will be and what is deemed in and out of scope. The team is responsible for testing the product and ensuring it meets their needs. The team is both the customer and the tester in this project.

Quality

Our team defines quality in the deliverables as coherent, informative, and completed in a timeframe. Our team will strive to meet and/or exceed the standards as expected of the client.

The team will deliver quality work based on our members' competency, division of labour, team communication, and as a group we will collectively review each deliverable before submission.

lication will be clear and nd simulate traffic cases. ssing.t be possible to adjust the l have priorityn his city. intersecti

Version: 0.0n order ehind project plan scheduleTime

Forecast on the amount of time needed to successfully carry out these activities is:

* Meeting with client 9 hours
* Designing user cases 18 hours
* Designing class diagrams 18 hours
* Building and testing application 150 hours
* Designing process report 6 hours
* Designing presentation 2 hours

Meeting with group members 648 hours

and working at project together

(The calculations are for the total number of hours of all group members combined.)

Organization

Our project has the following structure of organization:

Contact person

**Raima Khan**

**Andre Postma** (Assistant)

**Mr. Johnson** (formal client)

Team members

**Mihail Hadzhinikolov**

**Zisis Damianidis**

**Al Al-Mohaiminul Islam Khan**

Project leader

**Richard Dyer**

ASSUMPTIONS

Minute keeper

**Tsanko Hadzhiev**

Project assumptions

Following are assumptions in our project:

* We assume that the weather will follow previous weather patterns.
* Cost of the land will not be calculated in the application.
* The application will also not account for diseases.

Milestones

The following represents key project milestones, with estimated completion dates:

**Milestone**

**Phase I: Initiation**

The initiation is the start of the project. During the initiation phase, objectives, purpose to be produced.

Tasks for the activity are:

* Organize team (chose Leader and set rules)
* Interview with the client

Deliverables for Phase I:

* Project proposal
* Project plan
* Concept version of URS

Estimated deadline: 18th September 2016

**Phase II: Design**

During Design phase two major events will take place: creating the URS and Test plan.

Deliverables for Phase II:

* User Requirements Specification document
* Test plan

Estimated deadline: 1st October 2016

**Phase III: Build**

During the build phase result is evaluated according to the list of requirements that were created in the URS

Deliverables for Phase III:

* Demo application

Sprint Planning

* Design documentation
* Test cases
* Test report
* Application Code
* Demo

Estimated deadline:2nd December

**Phase IV: Deploy**

Deployment is the final phase of the project, application is completed and presented to the client.

Deliverables for Phase IV:

* Application
* Presentation

Estimated deadline:20th January

In the table below are shown the phases with its deliverables and the estimated completion date.

Design

Deploy

Build

Initiation

Final version

Interview client

URS

Coding

Start-up

Design documentation

Presentation

Create a test plan

Project Plan

Test cases

App code/Demo

Test report

August 28th October 5th November 25th January 10th January 20th

*Figure 1.1*

Roles and responsibilities

Project Roles and Responsibilities

| **Role** | **Responsibilities** | **Participant(s)** |
| --- | --- | --- |
| Project leader | 1. Provide project guidance 2. Review/approve some project decisions 3. Arrange meeting with client. 4. Provide help in creating documents 5. Provide help in creating application | Richard Dyer |
| Contact person | 1. Contact client 2. Send all deliverables to client on time 3. Create agenda 4. Provide help in creating documents 5. Provide help in creating application | Raima Khan |
| Minute keeper | 1. Note minutes of all meetings 2. Provide help in creating documents 3. Provide help in creating application | Tsanko Hadzhiev |
| Project Participants | 1. Provide help in creating documents 2. Provide help in creating application | Mihail Hadzhinikolov  Zisis Damianidis  Al Al-Mohaiminul Islam Khan |

APPROVALS

Sign-off Sheet