Software Project Management Plan:

Project Plan

SF-Africulture

WS 2019

Jacopo Campagnola   Christian Farina   Giorgio Hinegk   Gian Marco Pertile

Software Project Management Plan:

Project Plan

Introdiction

Table of Contents

Introduction

Project Overview

The ITI Guglielmo Marconi would like to create a website that provides general information on the methods and timing of cultivation of the fields. Users will enter the place of the field to be cultivated and the type of vegetable or plant that they would like to cultivate in the field previously entered. All these data will be inserted in a DataBase for storing data.

The objective of this project is to provide a web application that provides entrepreneurs with the opportunity to manage their capital in the best possible way in the field of agriculture. This team defines project goals to be:

- Possibility for an individual to manage their finances
- Possibility for an individual to view and manage all the investment possibilities on their agricultural fields

- Possibility for an individual to see the progress and growth of their agricultural fields with an additional visibility of plant growth in such fields
- Opportunity for entrepreneurs to see any market value of their land

This team defines project success by the following criteria:

- All the objectives of the project as specified above are achieved (these are the characteristics and basic functions required by the customer.
- The final product is easy to use for 95% of WebApplication users.
- The members of this team understand the components needed in the software development life cycles and are able to work together to produce a working product and adequate results.

Project Deliverables

DELIVERABLE	SUBMITTAL DATE
Project Macro Plan	27/11/19
Baseline Requirements Document	
Project Plan	
Technology Prototype	
Customer-Approved User Interface	
Architecture Document	
First Iteration of the Product (Group Review)	
First Iteration of the Product (User Review)	
Testing Document	
Second Iteration of the Product (Group Review)	
Second Iteration of the Product (User Review)	
User Guide and System Documentation	
Final Product (Group Review)	
Final Product (Class Review)	
Final Product Presentation to User	

Definitions

Providers	Professors affiliated with ITI Guglielmo Marconi will help supervise and are involved in this WebApplication. They will need to have administrative access.
Students	Students of ITI G. Marconi who will be working with a provider to research and answer questions.
ITI G. Marconi	ITI Guglielmo Marconi --> Verona
UML	Unified Modeling Language: standard diagramming tools for use in software development.

Users	People affiliated with ITI Gugliemo Marconi (students, teachers and staff with user ID and password).

Project Organization

Organizational Structure

This team has five team members: a project manager, technical writer, requirements engineer/tester, a developer and a database builder. All positions are considered lateral and all team members are able to interact with each other without bureaucracy. The organizational structure of SF-Agriculture Team is best described in the following diagram:

Project Responsibilities

Project Manager

Project Manager	Identify and assign the activities as, and if, necessary. Collaborate with team members to determine the estimated time required for activities and create internal timelines. Monitor team members' progress and provide status reports. Keeps the project moving according to the specified guidelines and urges help, if necessary, to meet the deadlines required.
Requirements Engineer/Tester	It performs liaison duties with customers, including: determination of the product user interface, determination of product requirements and, with the help of the writer, creation of user documentation. Check at each iteration that the product meets the customer's needs. Determines the necessary and unnecessary functions based on customer wishes. Create a test plan and run tests to ensure the final product is working properly.
Writer	Determines the general design and architecture of the product. Maintains control of product and documentation changes and versions. It receives the documentation sent and follows the documentation guidelines. Assists all other positions with their documentation. Keeps the documentation consistent.
Developer	Develops product design and implementation. Select the programming language and the implementation mode. Create code documentation.

Database	Collaborate with the developer to coordinate and implement the elements of the project database. Help the developer with other implementation needs, if necessary. Work with the writer on any need for database documentation.

Managerial Process

Management Objectives and Priorities

Project management helps individual team members visualize the overall framework of the project, as well as providing clarity on the division of tasks, on the timing of tasks to be completed and on the costs associated with the tasks. Given the breakdown of required activities, individual team members can estimate the time requirements for the activities in question. The division of labor helps team members to clearly estimate the time required for each individual task and not be overwhelmed by all the needs of the project.

This project has strict planning constraints and a defined deadline for completion. Given these constraints, planning is the top priority. It is necessary to keep track of all the activities that must be performed in a limited time.

Assumptions, Dependencies and Constraints

This team is confident that there will be no technological difficulties regarding the hosting and availability of the WebApplication because permission has been granted to use the IT resources of the G. Marconi ITI.

This project will suffer a serious setback if a team member leaves. The timing and budget of this project will not be able to manage a loss of personnel without sacrificing the characteristics and quality of the final product.

This project depends on customer communication. Lack of feedback or delay in feedback can result in a loss of quality.

Risk Management

The risks currently present with this project are described below. They are ranked in order of priority and list the answers to help mitigate the risk.

RISKS	RISK RESPONSE
Difficulties overcoming technical inexperience	Spend more time on research and training. Determines the specific technologies that are of interest so that each team member can do research instead of the developers having to do everything. Consult other teams on specific technological issues.

RISKS	RISK RESPONSE
Unrealistic Schedule	Change the scope of this project. Define the priorities of the requirements and implement the functions in order of priority.
Underestimate amount of work	Allocate more resources and redistribute the team's objectives accordingly.
Transfer of the development to the shared folders of the work group	Discuss how to configure the development interface with a technical specialist.
WebApplication interface	Create the WebApplication so that the user can easily learn how to use it.
Time spent working on project exceeds time allotted	The project manager to evaluate the efforts and assignment of resources to the tasks so that the time spent on the project is more equitable. The project manager must communicate the efforts and tasks to the team members so that they help each other.
Changes to Requirements	The customer must request specific functions necessary for the final product and redistribute the project to achieve these objectives. Other functions can be added only when time permits.

The following risks have been added and minimized:

RISK	RISK RESPONSE
Assumption by the customer of the fact that the project is almost complete based on external views	Project manager or Liaison Client to discuss this topic with the client.
	Outcome
	An e-mail was sent to the customer regarding the technical difficulties related to the previous development. The customer appreciates the difficulty and understands that progress may not be as far off as previously thought.

Configuration Management

All changes to the Basic Requirements Document require that the person requesting such changes discuss their needs with the entire group. While each member of the group has input, the individual for whom the change has the most influence will have the final decision.

Any decision to change the baseline should therefore be discussed with the Project Manager so that appropriate time estimates and rescheduling can occur.

Monitoring and Controlling

This project will follow the lifecycle model of iterative and incremental development software, in particular the phased delivery model to monitor the project and monitor progress. The gradual delivery model with all iterations should allow this team to get adequate feedback on prototypes and break down the work structure and task planning to a manageable level.

Staffing Plan

The team members for this project were selected by the professors. There are no plans to add or remove members at this time.

Technical Process

Methods, Tools and Techniques

This project will use the iterative software development methodology and use Rational Rose to create analysis and design models.

Development Environment

Operating System	Windows 10
Software Langauges	CSS, ??
Database	
Server	

WBS, Schedule, and Budget

Work Breakdown Structure

Below is a list of the final results and activities necessary to produce the final result.

DELIVERABLES	ACTIVITIES
Requirements Document	
Project Plan	
Technology Prototype	
Architecture Document	
First Iteration	
Second Iteration	
User Guide and System Documentation	

DELIVERABLES	ACTIVITIES
Final Product	

Dependencies

Due to time constraints, project management plans, requirements plans, architectural plans and development are occurring simultaneously. Code development will require analyzing customer feedback, changing requirements based on needs and architecture if necessary.

Resource Requirements

Staff resource requirements are 5 team members including developers, requirements engineers, technical writers and project managers. All team members will need minimal computer access with basic programs. Furthermore, all members should have the reserved environment on their computers so that they can help with development needs.

Schedule

The program for this project is divided into two different ways: by duration of the activity (determined so that the project ends in time). Also showing how many hours of engagement should be assigned to each activity each week. In addition to the time spent on individual activities, there will be the so-called "general time". which includes time spent on communication, planning, status reports and updates. This overload time will be documented separately.

The features that this team will implement are broken down by iteration:

Budget and Resource Allocation

There are no financial costs associated with this project. This project will be estimated based on the time allowance. The current estimate is that each team member will dedicate 80 hours to this project, for a total of 400 hours. For each team member, this works at 3 hours per week.

Time (in hours for team)

CATEGORY	ALLOTTED	ACTUAL
Analysis		
Design		
Documentation		
Implementation		
Planning		
Requirements		
Research		

CATEGORY	ALLOTTED	ACTUAL
Testing		