**PROJECT MANAGEMENT**

**MILESTONE 02**

**Section 01 - Group 02**

**Project Title:** **Project Management Controller**

**Project Description:**

**Statement of need:** Themain theme this project is creating an interactive website (Ex: Survey, Quiz) to assist Northwest Missouri State University students who all are studying 44-618 Project Management in Business and Technology. This Interactive website help students to learn all the five (5) process groups such as initiating, planning, executing, monitoring & controlling, closing and all 10 Knowledge Areas.

**Team Name:** Ignited Minds.

**Team Members:**

* Vamsee Krishna Gangapatnam
* Sai Manikanta Durga Prasad Vinukonda
* Venkata Dasari
* Akash Valluri

**Client:** Prof.Dr.Case

**Team Logo:**



**Repo link:** [https://github.com/vamsee474/cloud-managed-services-project](https://github.com/vamsee474/cloud-manged-services-project)

**Team Communication and Participation:**

* We are planning to meet our team members at the North West Missouri state university library.

(B D Owens) We will arrange a time window that is flexible to all team members.

* We are planning to share contact information through skype (IM), what’s up group or outlook mail.
* If any team member falls behind schedule due to any reasons, we will guide and support him/her.

**Roles:** 

|  |  |
| --- | --- |
| **Area/Topic** | **Responsible Team members** |
| Project Manager | Vamsee Krishna Gangapatnam |
| Business Analyst | Sai Manikata Durga Prasad Vinukonda |
| Front end Developers /software Engineers | Vamsee Krishna Gangapatnam, Sai Manikata Durga Prasad Vinukonda, Aakash Valluru, Venkata Dasari |
| Application support team/Software Engineers | Vamsee Krishna Gangapatnam, Sai Manikata Durga Prasad Vinukonda, Aakash Valluru, Venkata Dasari |
| Testers | Vamsee Krishna Gangapatnam, Sai Manikata Durga Prasad Vinukonda, Aakash Valluru, Venkata Dasari |

**Project Charter:**

|  |  |  |
| --- | --- | --- |
| **Knowledge Areas** | **Artifacts** | **Member Responsible** |
| 1. Project Integration Management | Develop Project Charter | Vamsee Krishna Gangapatnam |
| Develop Project Management Plan | Vamsee Krishna Gangapatnam |
| 1. Project Scope Management | Requirement Management Plan | Sai Manikanta Durga Prasad Vinukonda |
| Requirements specifications Document | Akash Valluru |
| Scope Management Plan | Venkata Dasari |
| Scope Statement | Venkata Dasari |
| Work Breakdown Structure | Vamsee Krishna Gangapatnam |
| 1. Project Time Management | Schedule management plan   1. Gantt charts | Sai Manikanta Durga Prasad Vinukonda |
| 1. Project Cost Management | Cost management plan   1. Cost estimation and determine budget | Aakash Valluru |
| 1. Project Quality Management | Quality management plan   1. Items included for Quality control | Venkata Dasari |
| ii) Benchmarking against other products or projects | Vamsee Krishna Gangapatnam |
| iii) Measurement regarding types of defects | Sai Manikanta Durga Prasad Vinukonda |
| 1. Project Human Resources Management | Human resources management plan  i) Project organizational charts | Akash Valluru |
| ii) Responsibility assignment matrices | Venkata Dasari |
| iii) Resource histograms | Vamsee Krishna Gangapatnam |
| 1. Project Communications Management | Communication management plan  i) Stakeholder Communication analysis | Sai Manikanta Durga Prasad Vinukonda |
| 1. Project Risk Management | Risk management plan  i) Risk register details | Sai Manikanta Durga Prasad Vinukonda |
| ii) Risk mitigation strategies documents | Vamsee Krishna Gangapatnam |
| 1. Project Procurement Management | Procurement management plan  i) Statement of Work(in detail) | Venkata Dasari |
| ii) Request for proposal | Sai Manikanta Durga Prasad Vinukonda |
| 1. Project Stakeholder Management | Stakeholder management plan  i) Stakeholder inventory | Akash Valluru |
| ii)Stakeholder detail analysis | Sai Manikanta Durga Prasad Vinukonda |
| iii)Tracking Issue log | Venkata Dasari |
|  | Final Presentation | Venkata Dasari, Sai Manikanta Durga Prasad Vinukonda, Akash Valluru,  Vamsee Krishna Gangapatnam |

**Team Signatures:**

|  |  |  |
| --- | --- | --- |
| S. No | Team Member Name | Signatures |
| 1. | Sai Manikanta Durga PrasadVinukonda |  |
| 2. | Vamsee Krishna Gangapatnam |  |
| 3. | Venkata Sai Krishna Dasari |  |
| 4. | Akash Valluru |  |

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Project Integration Management

Project Charter

**Project Title**: Project Management Controller

**Project Start Date:** 05/02/2019 **Projected Finish Date:** 06/09/2019

**Budget Information:** Budget allocated about $3 million for this project including internal labor costs, infrastructure costs and software costs.An additional of $7, 50, 000 million will be provided if required further.

**Project Manager:** Vamsee Krishna Gangapatnam, (660) 528-1049, [s533908@nwmissouri.edu](mailto:s533908@nwmissouri.edu)

**Project Objectives:** The main theme of this project is creating an interactive website (Ex: Survey, Quiz) to assist Northwest Missouri State University students who all are studying 44-618 Project Management in Business and Technology. This Interactive website help students to learn all the five (5) process groups such as initiating, planning, executing, monitoring & controlling, closing and all 10 Knowledge Areas.

**Main Project Success Criteria:** The Web App (Quiz or Survey app) that we are going to create should be very impressive in terms of UIthe application must be user friendly and entire application need to be tested to meet the requirement

**Approach:**

* Business Analysts need to be hired to gather the client requirements.
* Estimate the cost based on the requirements and develop a project plan.
* Install and setup work area and software’s at early stage i.e., within 7 days.
* Scrum meetings need to be conducted to know the project progress and to resolve the obstacles.
* Application need to be thoroughly tested before the project is delivered.

**Roles and Responsibilities**

|  |  |  |  |
| --- | --- | --- | --- |
| **Role** | **Name** | **Organization/**  **Position** | **Contact Information** |
| Sponsor | SaiManikanta Durga Prasad Vinukonda | CEO | (660) 5280298  [S533980@nwmissouri.edu](mailto:S533980@nwmissouri.edu) |
| Program Manager | Vamsee Krishna Gangapatnam | Program Manager | (660) 5281049  [S533908@nwmissouri.edu](mailto:S533908@nwmissouri.edu) |
| Project Manager | Vamsee Krishna Gangapatnam | Project Manager | (660) 5281049  [S533908@nwmissouri.edu](mailto:S533908@nwmissouri.edu) |
| Team Lead | Venkata Dasari | Team Lead | (660) 5280607  [S533489@nwmissouri.edu](mailto:S533108@nwmissouri.edu) |
| Programmer | Venkata Dasari | Senior Software Developer | (660) 5280607  [S533489@nwmissouri.edu](mailto:S533489@nwmissouri.edu) |
| Programmer | Venkata Dasari | Senior Software Developer | (660) 5280607  [S533489@nwmissouri.edu](mailto:S533908@nwmissouri.edu) |
| Programmer | Venkata Dasari | Software Developer | (660) 5280607  [S533489@nwmissouri.edu](mailto:S533181@nwmissouri.edu) |
| Tester | Akash Alluri | Test Engineer | (660) 5280893  [S533714@nwmissouri.edu](mailto:S533714@nwmissouri.edu) |

**Sign-off:** (Signatures of all above stakeholders)

|  |  |
| --- | --- |
| Sai Manikanta Durga PrasadVinukonda |  |
| Vamsee Krishna Gangapatnam |  |
| Venkata Sai Krishna Dasari |  |
| Akash Valluru |  |

**Comments:** (Handwritten or typed comments from above stakeholders, if applicable)

Project Management Plan

**Prepared by – Vamsee Krishna Gangapatnam Date: 05/12/2019**

# **Introduction**

**Project Overview:** Themain theme this project is creating an interactive website (Ex: Survey, Quiz) to assist Northwest Missouri State University students who all are studying 44-618 Project Management in Business and Technology. This Interactive website help students to learn all the five (5) process groups such as initiating, planning, executing, monitoring & controlling, closing and all 10 Knowledge Areas.

**Project Deliverables:** Project Charter, project management plan, Requirements specifications Document, Scope Statement, Work Breakdown Structure, Gantt charts, Cost management plan, Stakeholder register, Status reports, Issue log, Final project documentation and lessons learnt documentation. Finally, a product to be delivered which is a Interactive web app based on requirement specifications and meeting functionality of the business.

**Evolution of the SPMP:** All the changes created throughout net application development for interactive web app are half-track and checked the progress through the Google Docs. Procedure must be followed for each modification request i.e., the changes created should be reviewed by the Project Manager of ITS team and a resource among the team is known and given access to forma document in Google Docs. Once the SPMP for the modification is formed by the resource, a user profile is formed for the remainder of the team members for the access to the created document and Google Docs can create a replacement version anytime the document is saved.

**Reference Materials:**

We have referred many documents of the profitable projects, realized the classes from below stated textbook and chosen the exceptional among them for ETM challenge reason for the better management of the project and to make the venture successful.

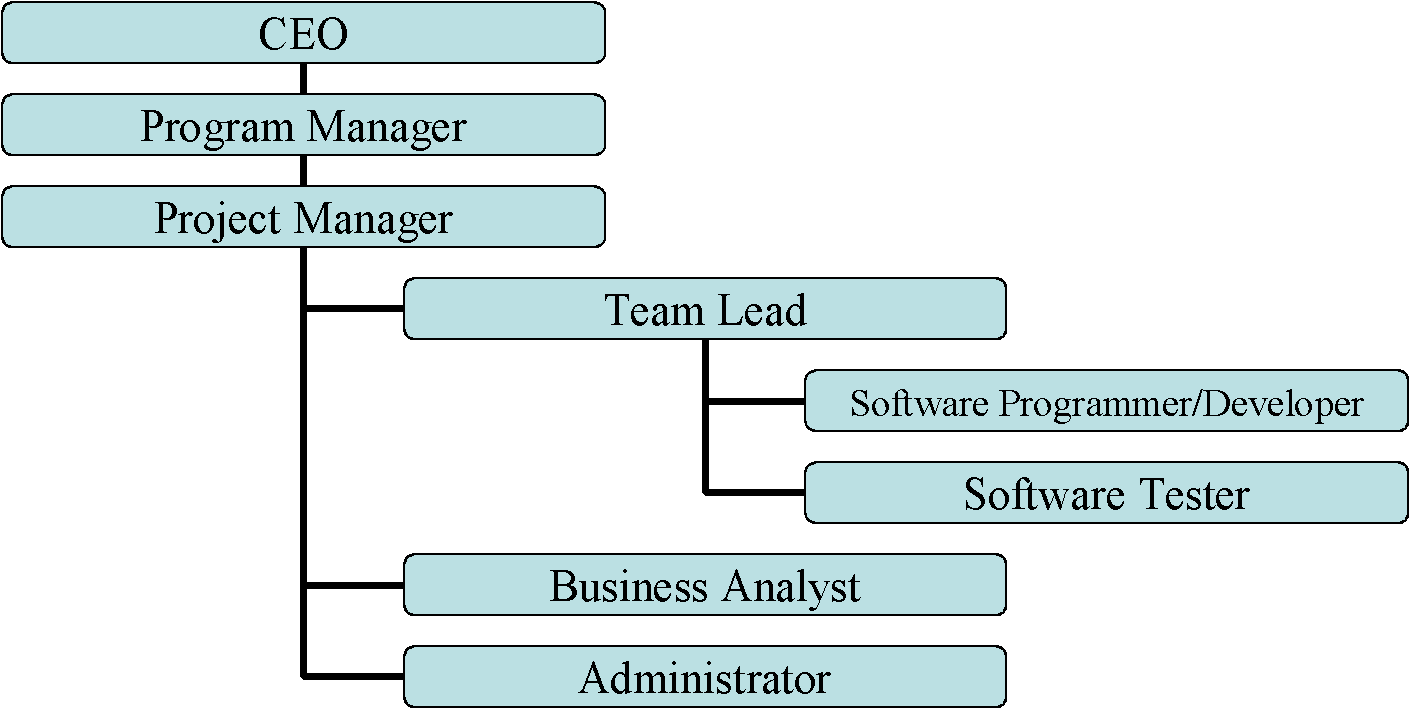
A Guide to the Project Management Body of Knowledge (PMBOK Guide) 2000 edition - Project Management Institute.

**Definitions and Acronyms**

SPMP: Software Project Management Plan

# **Project Organization**

**Organizational Structure:**



**Organizational Boundaries and Interfaces:**

The observed structure is the organizational structure for our project. The authority is given hierarchical wise. Each person is given authority to his area of work and needs to report to the person who is in a level above him.

**Project Responsibilities:** The project should meet the standards and constraints like delivered on time, with reasonable cost and good quality. Project Manager must coordinate and work effectively with the team members and other stakeholders and make sure all the resources are utilized properly to complete the project on time. Moreover, he is responsible for project plan preparation with sign-off and communicating between functional and technical areas, giving project status reports to the higher executives and budget tracking.

# **Managerial Process**

**Management Objectives and Priorities:**  Project manager ensures that the product must satisfy Northwest students (i,e end users). Management Authority reviews monthly status of the project. Top Priorities are to meet all the requirements within the time and budget.

**Constraints:**

The project needs to meet the organization triple constraints scope, time and cost.

**Risk Management:** Risk Management team will identify the risks in upgrading process and plans appropriate actions to manage them by analyzing root cause.

Monitoring and Controlling Mechanisms ensures that the project deliverables will be reviewed regularly and controls if any inappropriate performance occurs by identifying and solving issues throughout the project.

**Staffing Plan:** The project requires project manager, program manager, database analyst, finance analyst, programmers, test engineers and other staff. All the staff must be highly skilled and trained.

# **Technical Process**

**Methods, Tools, and Techniques:** Lucid chart. Windows and Mac OS are used as developing environments in our interactive web app. Technologies where we use HTML, JAVA, JavaScript and PL/SQL technologies and database is Oracle 11c. Tools used are Microsoft Visio, MS Project, NetBeans and Visual Studio.

**Software Documentation:** includes all the documents produced by every team member by following documentation rules. All these documents need to be reviewed and approved by project manager.

**Project Support Functions:**Project manager prepares the releasing plan based on client requirements, time, scope and budget of the projects.

Daily scrums by involving all the stakeholders of the project to know the project progress and to make any changes as per client suggestions.

Application performance need to be monitored and controlled changes throughout the project life cycle.

# **Work Packages, Schedule, and Budget**

**Work Packages:** Itincludes all the subtasks involved in the project like project charter, project plan, requirement analysis, hardware and software installation, resource gathering and allocation, develop the code, make changes if required, implement the code, monitor and control the application, document the lessons learnt, final documentation of the project and release the product.

**Resource Requirements:** This project requires just few laptops(or) desktops to check the app is working fine or not.

**Budget and Resource Allocation:** The budget of the project is $1223582 and Project manager allocates all the resources to tasks based on usage, roles and responsibilities.

**Schedule:**. Detailed schedule of the project is given in project time management plan.

**Project Scope Management**

**Requirements management plan**

**Planning:**

* The consent of all the stakeholders should be gathered within 5 days.
* Project budget must be less than $3,000,000.
* All software required for the project should be installed.
* Hardware need to be purchased and connected.

**Analyze:** All the requirements gathered should be checked for any changes and report it to the project manager with a change request plan if any changes are required.

**Metrics:** It is used for measuring different factors like performance, productivity, quality, etc.

**Tracking:** These requirements will be tracked by weekly progress reports by stake holders

**Validation and Testing:** Once a deliverable is produced for a requirement then the project manager is notified and validate the requirement whether it met the standards and is that fine moving to next requirement.

**Requirements specifications document**

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Requirement** | **Priority** | **Type** |
| 1. | Web portal should be user friendly | High | Functional |
| 2. | The web portal should allow employees to access only after providing credentials | High | Functional |
| 3. | The web portal should allow employee to perform operations based on his/her eligibility | High | Functional |
| 4. | Employees should be able to see the content they added | Medium | Functional |
| 5. | The credentials of employees should work only with in organization | High | Non-Functional |
| 6. | The amount paid or to be paid for workers or resources should be stored securely | High | Functional |
| 7. | Web portal should be open for any complaints or suggestions by any employee | Low | Non-Functional |
| 8. | It should allow the employees to view the details of clients, workers, etc. | Medium | Non-Functional |
| 9. | Response time should be less than 30 seconds | Medium | Non-Functional |
| 10. | Employees should be able to see the history of the workers | Low | Non-Functional |
| 11. | Storage of user information | Medium | Non-Functional |

**Scope Statement Plan**

**Scope Management plan includes the following information,**

1. How to prepare a detailed project scope statement?

* Using the feedback from the employee and user, an analysis will be conducted on software applications used by the company.
* From this information, the project requirements documentation, management plan, and a traceability matrix are developed which need to be accomplished by the software applications.
* Expert judgement is considered at all stages of the development process which helps developers to find effective ways to meet the original requirements.

1. How to create a WBS?

* To provide an effective management, the project is divided into six phases: initiation, planning, design, development, testing and deployment.
* Now, the work needs to be divided into sub tasks where each individual would work not more than 40 hours per week.

1. How to maintain and approve the WBS?

* Maintenance and approval of WBS will be done by project manager based on deadline and scope of project.
* And also, if there are any change proposed to the WBS, manager will recheck whether the new system packages are within the scope or not and accordingly approve it.

1. How to obtain formal acceptance of the completed project deliverables?

* Upon producing a deliverable, the team will check if deliverable meet the requirements.
* Then it is forwarded to the project manager who will recheck the deliverables by taking the consideration of acceptance criteria defined in the requirements document and project scope statement.
* Project sponsor will be notified upon completion of project.

1. How to control requests for changes to the project scope?

* Any project team member or sponsor can request change in project scope. Change requests are submitted to project director by project request document.
* The project director then reviews document and then either accepts or rejects.
* If the change request receives initial approval by the project director and sponsor, the project director will then formally submit the change request to the change control board (CCB) which either approves the change by signing document or denies it.
* Upon acceptance of the scope change by the CCB and project sponsor the project director will update all project documents and communicate the scope change to all project team member’s stakeholders.

**Scope Statement**

|  |
| --- |
| **Project Title:** Project Management Controller **Date: 5/13/2019**  **Prepared by:** Sai Manikanta Durga Prasad Vinukonda |
| **Project Justification:** The main theme this project is creating an interactive website (Ex: Survey, Quiz) to assist Northwest Missouri State University students who all are studying 44-618 Project Management in Business and Technology |
| **Product Characteristics and Requirements:**   1. All the Authorized students those who are 44-618 Project Management in Business and Technology should be able to access the web portal in the company by providing their credentials. 2. There should be different tabs are provided for different purposes. 3. Each Tab serves a unique purpose. 4. There must be a friendly user interface which makes start and stop and search easy in the site. 5. There must be a dedicated team should be available for 24/7 to maintenance and support for the project. Because for a immediate approach if any issue happens in the site . |
| **Summary of Project Deliverables**  **Project management-related deliverables:** business case, charter, team contract, scope statement, WBS, schedule, cost baseline, status reports, final project presentation, final project report, lessons-learned report, and any other documents required to manage the project.  **Product-related deliverables:**     1. A demo video showing the how the website will look, and it works and basic functionality. 2. A half part of website is showed that how it works for the some tabs. 3. A part website with the no functionality will be shown. 4. A total website with some functionalities with user acceptance be shown. 5. Complete part of a website is shown to the clients. 6. After all required testing the website is delivered to clients that satisfy the client requirements and delivered. |
| **Project Success Criteria:**   * Quickly responds to the requirements suggested by the client. * Availability of 24/7 in the project * On time delivery of deliverables to client in the every phase. * Giving a 100 percent client satisfaction with the web portal. * User friendly and happy operating features for employee in the project. |
|  |

**Work Breakdown Structure (WBS)**

**Prepared By:** Sai Manikanta Durga Prasad Vinukonda

**Date: 05/13/2019**

1. Initiation
2. Stakeholder Identification
3. Select Project Manager
4. Develop Project Charter
5. Approval of Project charter
6. **Review Project Charter**
7. Planning
8. Develop Scope statement
9. Develop Requirement Management Plan
10. Develop the project plan
11. Develop Requirement Traceability matrix
12. Develop cost management plan
13. Develop the Project management plan
14. Develop Quality Management Plan
15. Develop Project Management Plan
16. **Approval of all plans**
17. Execution
18. Get all the resources required
19. Decide the components of the website
20. Develop a prototype
21. Get approval for the prototype
22. Begin the development
23. **Finish the development**
24. Testing
25. Unit Testing
26. Integration Testing
27. System Testing
28. User Acceptance Testing
29. **Testing Complete**
30. Monitoring and Controlling
31. Track the system for bugs
32. Response to complaints
33. Closing
34. Document the lessons learned
35. Project Demo
36. **Project Hand over**

**Project Time Management**

**Schedule Management Plan**

Gantt chart is attached with the document

**Project Cost Management**

**Cost Management Plan**

Cost estimation and determine budget is attached to the document

**Project Quality Management**

**Quality Management Plan**

Measurements regarding type of defects

|  |  |  |  |
| --- | --- | --- | --- |
| **S No** | **Defect Level** | **Defect Name** | **Measurements** |
| 1 | High-Level Defects | Wrong Estimation,  Not allocating work to an ideal individual,  Planning errors | Project estimation should be proficient more suitably and sufficient time should be given to evaluate the project.  Project Manager should have a better than average data of the partners and their abilities and dole out work in like way.  Care must be taken in the arranging stage, so that later shocks are evaded. |
| 2 | Mid-level Defects | Bugs,  Integration issues | Bugs are standard in any project so suitable testing and quality affirmation should be actualized.  Exactly when modules are united together and attempted on a whole a couple issues may develop so the testing gathering should have enough learning of the extensive number of modules |
| 3 | Low-level Defects | Screen Resolution,  Hard-disk specifications | Screen resolution of the PCs won't not be awesome which may not be a tremendous issue but instead work should be conceivable better if it is as per the particulars |