*Team-D Sigma*

Project Management Plan

Version *2.0*

*November 15, 2016*

**Introduction**

The “Department course scheduling assistant” is an application where we schedule the classes for the faculty without any clash in between classes. Long back we used to do it on papers. As the size of organization increases it is not at all easy to do it on papers. So we ended up doing this application which would be helpful for teachers, professors, administrator etc.

## Project Management Approach

The Project Manager has the overall authority and responsibility for managing and executing this project according to this Project Plan and its Subsidiary Management Plans. The project team will consist of personnel from the coding group, quality control/assurance group, technical writing group, and testing group. The project manager will work with all resources to perform project planning. All project and subsidiary management plans will be reviewed and approved by the project sponsor. All funding decisions will also be made by the project sponsor. Any delegation of approval authority to the project manager should be done in writing and be signed by both the project sponsor and project manager.

The project team will be a matrix in that team members from each organization continue to report to their organizational management throughout the duration of the project. The project manager is responsible for communicating with organizational managers on the progress and performance of each project resource.

**Project Scope**

The scope of “Department course scheduling assistant” project includes the planning, design, development, testing, and scheduling of classes. This software will meet or exceed organizational software standards and additional requirements established in the project charter. The scope of this project also includes completion of all documentation, manuals, and training aids to be used in conjunction with the software. Project completion will occur when the software and documentation package has been successfully executed. All “Department course scheduling assistant” project work will be performed internally and no portion of this project will be outsourced. The scope of this project does not include any changes in requirements to standard operating systems to run the software.

## Milestone List

## The below chart lists the major milestones for the “Department course scheduling assistant” Project. This chart is comprised only of major project milestones such as completion of a project phase or gate review. If there are any scheduling delays which may impact a milestone or delivery date, the project manager will be notified immediately so proactive measures may be taken to mitigate slips in dates. Any approved changes to these milestones or dates will be communicated to the project team by the project manager.

|  |  |  |
| --- | --- | --- |
| Milestone | Description | Date |
| Complete Requirements Gathering | All requirements for Scheduling assistant must be determined to base design upon | Completed. |
| Complete design | This is the theoretical design for the software and its functionality. | Completed. |
| Complete coding | All coding completed resulting in software prototype | Yet to completed. |
| Complete testing and debugging | All functionality tested and all identified errors corrected. | Yet to be completed. |

## Change Management Plan

## In between the development phase of “Department course scheduling assistant” project, if client comes with some new requirements or changes in requirements then this change management plan will be useful.

## The following steps comprise organization change control process for all projects and will be utilized on the Scheduling assistant project:

## Step #1: Identify the need for a change (Any Stakeholder)

## Requestor will submit a completed change request form to the project manager

## Step #2: Log change in the change request register (Project Manager)

## The project manager will maintain a log of all change requests for the duration of the project.

## Step #3: Conduct an evaluation of the change (Project Manager, Project Team, Requestor)

## The project manager will conduct an evaluation of the impact of the change to cost, risk, schedule, and scope.

## Step #4: Submit change request to Change Control Board (CCB) (Project Manager)

## The project manager will submit the change request and analysis to the CCB for review.

## Step #5: Change Control Board decision (CCB)

## The CCB will discuss the proposed change and decide whether or not it will be approved based on all submitted information

## Step #6: Implement change (Project Manager)

## If a change is approved by the CCB, the project manager will update and re-baseline project documentation as necessary as well as ensure any changes are communicated to the team and stakeholders

**Communications Management Plan**

This Communications Management Plan sets the communications framework for this project. It will serve as a guide for communications throughout the life of the project and will be updated as communication requirements change. This plan identifies and defines the roles of our project team members as they pertain to communications.

It also includes a communications matrix which maps the communication requirements of this project, and communication conduct for meetings and other forms of communication. A project team directory is also included to provide contact information for all stakeholders directly involved in the project.

The Project Manager will take the lead role in ensuring effective communications on this project. The communications requirements are documented in the Communications Matrix below. The Communications Matrix will be used as the guide for what information to communicate, who is to do the communicating, when to communicate it, and to whom to communicate.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Communication Type** | **Frequency** | **Participants/**  **Distribution** | **Deliverables** | **Owner** | **Format** |
| *Requirements Modification/New Requirements* | *Daily* | *Team Sigma* | *Requirement Documents, Revised Project Documentation* | *Business Analyst* | *Face- Face* |
| *Weekly Status Reports* | *Weekly* | *Dr.Micheal Oudshoorn and team Sigma* | *Work Progress on individual tasks/ subtasks based on the Gantt Chart* | *Harika Malempati* | *Email* |
| *Client Meeting* | *Bi-Weekly* | *Client and team Sigma* | *Tracking report on individual’s performance* | *Dr.Micheal Oudshoorn* | *Face-Face* |
| *Quality-Assurance Meeting* | *Bi-Weekly* | *Team Sigma* | *Quality report on the applications performance* | *QA Manager* | *Face-Face* |

**Contact Details with Roles & responsibilities:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Role | Responsibility | Email | Contact number | Percentage  Complete |
| Dr.Michael Oudshoorn | Project Sponsor, Client | Instructor and Client | [oudshoorn@nwmissouri.edu](mailto:oudshoorn@nwmissouri.edu) | 660-562-1764 | None |
| Sravya Kandepu | Primary Contact, Documentation | Checking documents and uploading into repositories and also discussing with client. | [S525800@mail.nwmissouri.edu](mailto:S525800@mail.nwmissouri.edu) | 660-528-8085 | 50% |
| Sai Kiran Gandham | Client Manager | Set up Client Meeting and mediating between client and team. | [S525905@mail.nwmissoui.edu](mailto:S525905@mail.nwmissoui.edu) | 512-434-9662 | 45% |
| Nikhil Vemmula | Database manager | Designing, storing and managing database. | [S525775@mail.nwmissouri.edu](mailto:S525775@mail.nwmissouri.edu) | 660-528-1982 | 45% |
| Harika Malempati | Issue Manager | Tracking all issues throughout the project | [S525742@mail.nwmissouri.edu](mailto:S525742@mail.nwmissouri.edu) | 314-736-0901 | 60% |
| Nitheesha Kotagiri | Quality Analyst | Taking care of quality standards throughout the project cycle for quality deliverables. | [S525735@mail.nwmissouri.edu](mailto:S525735@mail.nwmissouri.edu) | 919-749-4450 | 45% |
| Sanket Selokar | Requirements  specifier | Gathering, analyzing, tracking and prioritizing the requirements. | [S525812@mail.nwmissouri.edu](mailto:S525812@mail.nwmissouri.edu) | 660-528-8237 | 85% |

**Communications Conduct:**

**Meetings:**

The Project Manager will distribute a meeting agenda at least 2 days prior to any scheduled meeting and all participants are expected to review the agenda prior to the meeting. During all project meetings the timekeeper will ensure that the group adheres to the times stated in the agenda and the recorder will take all notes for distribution to the team upon completion of the meeting. It is imperative that all participants arrive to each meeting on time and all cell phones should be turned off or set to vibrate mode to minimize distractions. Meeting minutes will be distributed no later than 24 hours after each meeting is completed.

**Email:**

All email pertaining to the Course Scheduling Assistant Project should be professional, free of errors, and provide brief communication. Email should be distributed to the correct project participants in accordance with the communication matrix above based on its content. All attachments should be in one of the organization’s standard software suite programs and adhere to established company formats. If the email is to bring an issue forward then it should discuss what the issue is, provide a brief background on the issue, and provide a recommendation to correct the issue. The Project Manager should be included on any email pertaining to the Scheduling assistant Project.

**Informal Communications:**

While informal communication is a part of every project and is necessary for successful project completion, any issues, concerns, or updates that arise from informal discussion between team members must be communicated to the Project Manager so the appropriate action may be taken.

## Cost Management Plan

The Project Manager will be responsible for managing and reporting on the project’s cost throughout the duration of the project. The Project Manager will present and review the project’s cost performance during the monthly project status meeting. Using earned value calculations, the Project Manager is responsible for accounting for cost deviations and presenting the Project Sponsor with options for getting the project back on budget. All budget authority and decisions, to include budget changes, reside with the Scheduling Assistant Project Sponsor.

For the Scheduling Assistant Project, control accounts will be created at the fourth level of the WBS which is where all costs and performance will be managed and tracked. Financial performance of the Scheduling Assistant. Project will be measured through earned value calculations pertaining to the project’s cost accounts. Work started on work packages will grant that work package with 50% credit; whereas, the remaining 50% is credited upon completion of all work defined in that work package. Costs may be rounded to the nearest dollar and work hours rounded to the nearest whole hour.

Cost and Schedule Performance Index (CPI and SPI respectively) will be reported on a monthly basis by the Project Manager to the Project Sponsor. Variances of 10% or +/- 0.1 in the cost and schedule performance indexes will change the status of the cost to yellow or cautionary. These will be reported and if it’s determined that there is no or minimal impact on the project’s cost or schedule baseline then there may be no action required. Cost variances of 20%, or +/- 0.2 in the cost and schedule performance indexes will change the status of the cost to red or critical. These will be reported and require corrective action from the Project Manager in order to bring the cost and/or schedule performance indexes back in line with the allowable variance. Any corrective actions will require a project change request and be must approved by the CCB before it can be implemented.

Earned value calculations will be compiled by the Project Manager and reported at the monthly project status meeting. If there are indications that these values will approach or reach the critical stage before a subsequent meeting, the Project Manager will communicate this to the Project Sponsor immediately.

## Project Scope Management Plan

Scope management for the “Course scheduling assistant” Project will be the responsibility of the Project Manager. The scope for this project is defined by the Scope Statement, Work Breakdown Structure (WBS). The Project Manager, Sponsor, and Stakeholders (client, all team members) will establish and approve documentation for measuring project scope which includes deliverable quality checklists and work performance measurements.

Proposed scope changes may be initiated by the Project Manager, Stakeholders or any member of the project team. All change requests will be submitted to the Project Manager who will then evaluate the requested scope change.

Based on feedback and input from the Project Manager and Stakeholders, the Project Sponsor is responsible for the acceptance of the final project deliverables and project scope.

The Project Sponsor is responsible for formally accepting the project’s final deliverable. This acceptance will be based on a review of all project documentation, testing results, beta trial results, and completion of all tasks/work packages and product functionality.

**Work Breakdown Structure:**



## Schedule Management Plan

Project schedules for the “Department course scheduling assistant” Project will be created using MS Project software starting with the deliverables identified in the project’s Work Breakdown Structure (WBS). Activity definition will identify the specific work packages which must be performed to complete each deliverable. Activity sequencing will be used to determine the order of work packages and assign relationships between project activities. Activity duration estimating will be used to calculate the number of work periods required to complete work packages. Resource estimating will be used to assign resources to work packages in order to complete schedule development. The project stakeholders will participate in reviews of the proposed schedule and assist in its validation.

**Gantt Chart:**



## Quality Management Plan

Nitheesha will play a role in quality management. It is imperative that the team ensures that work is completed at an adequate level of quality from individual work packages to the final project deliverable. The Project Sponsor is responsible for approving all quality standards for the “Department course scheduling assistant” Project. The Project Sponsor will review all project tasks and deliverables to ensure compliance with established and approved quality standards. Additionally, the Project Sponsor will sign off on the final acceptance of the project deliverable.

Nitheesha is responsible for quality management throughout the duration of the project. She is responsible for implementing the Quality Management Plan and ensuring all tasks, processes, and documentation are compliant with the plan. The Project Manager will work with her to establish acceptable quality standards.

## Risk Management Plan

The approach for managing risks for the “Department course scheduling assistant” Project includes a methodical process by which the project team identifies, scores, and ranks the various risks. Every effort will be made to proactively identify risks ahead of time in order to implement a mitigation strategy from the project’s onset. The most likely and highest impact risks were added to the project schedule to ensure that the assigned risk manager take the necessary steps to implement the mitigation response at the appropriate time during the schedule. Risk managers will provide status updates on their assigned risks.

Upon the completion of the project, during the closing process, the project manager will analyze each risk as well as the risk management process. Based on this analysis, the project manager will identify any improvements that can be made to the risk management process for future projects.

**Requirements Traceability Matrix:**

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## Staffing Management Plan

**Nitheesha:** Responsible for maintaining the quality throughout the software developing life cycle to deliver effective output. To achieve the qualitative deliverables testing plays an important role and will take the responsibilities to test project in each module.

**Sravya:** Responsible for acting as a primary contact with clients and will represent the whole team and communicates with client regarding project requirements, progression, changes and completion. She is also taking the responsibility of communication and documentation management and it includes updating all changes and tracking project progression in different versions.

**Harika:** Responsible for tracking all the issues in the project duration which may relate to internal staff or may be technical side and solve them upfront in order make the project go smooth.

**Sanket:** Responsible for gathering requirements from client and handle the changes in requirements as per the progress of project and would be analyzing, tracking and prioritizing the requirements.

**Nikhil:** Responsible for taking care of the collecting, storing and managing data in the database, and connecting data with front end system to update data which is entered by client and responsible for managing data for our project. Including database connectivity, database designing, data mining etc.

**Sai Kiran:** Responsible for arrange meetings, getting requirements from client and also giving updates to the client.

**Client Acceptance:**

Date:

Project Sponsor