**Project Management Plan**

**Prepared date: 11/14/2016**

**Project Name: Campus Cruise**

**Project Description:**

The application provides the campus tour to all the users to make them familiar with the campus buildings and the user will be able to choose the starting point of the tour. The user scans the QR code outside of the building and retrieves the data based on that. The data includes text and images and video. There is also a virtual tour for the users who are far away from the campus and wants to know the information about the campus.

**Project Deliverables:**

* 1. Final working model of Campus tour application
  2. User manual
  3. Installation manual
  4. Requirements document
  5. Software requirements specifications
  6. Test cases
  7. User manual
  8. Bug Tracker

Sponsor Name: Michael Oudshoorn

**Project Organization:**

* **Organizational structure:** We are using the divisional structure in this everyone is responsible for certain market services or in certain services in which they are flexible.
* **Organizational boundaries and interfaces:** Each task supervision is assigned to another member in the team as their responsibility to make them active and perform leadership.
* **Project responsibilities:** 
  + Each and every deliverable of a project should be developed meeting all the time, scope and cost constraints along with the procedures of the organization.
  + Client should always be supportive for the entire team by providing the required resources in the correct time.
  + All team members should always be interactive with the other team members and make sure that the product can be delivered in time to the client.

**Managerial process:**

* It is very important to know about the management objectives like goal of the top management, priorities of the project and know about the assumptions.
* The project should be monitored to handle the changes, the project should be reviewed on a weekly basis and deliverable should be formally accepted by the client.
* This project is assigned with 6 members to do the project.

**Technical Processes:**

* This deals with the tools and techniques required to do the project. Each organization will have their own tools for developing documents so we need to coordinate and should know what tools and processes to be followed while doing the project.
* Here we are using tools Android Studio, service provider Parse.com and database is Mongo DB.

**Budget Allocation:**

* The budget of the project is estimated using number of working hours individually.
* Allocation would be based on individual work capacities and ability to deliver before deadlines

**Schedule:**

* The project will start on 01/09/17 and it will run through 04/15/17 and detailed information of the schedule will be updated weekly in the client meeting.
* The client meeting would be in a specific format which would be discussed in the communication management plan.

**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.

**Scope Management Plan:**

This scope plan specifies the roles and responsibilities of a project scope and scope statement for the project. And also this plan defines WBS for the project and set of rules that needs to be followed to communicate within the project to control or validate the scope.

**Scope Management Approach**

Scope management and scope change will be handled by project sponsor, stake holders and project manager. Any changes to the scope will be submitted to the project manager for review and evaluation. After the evaluation project manager will take the decision with change control board along with sponsor. Based on the evaluations from stakeholders and manager project sponsor will approve and accept the changes to scope.

**Roles and Responsibilities**

Manger, sponsor and team members are responsible for scope change. Everyone in the project are aware of their responsibilities and scope change to complete the project within the budget and time.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | | Role | | Responsibilities |
| Michael Oudshoorn | | Sponsor | | Deny or agree on change requests  Change requests evaluation  Acceptance of deliverables |
| Mallikharjuna Rao Dande | | Project Manager | | Project scope verification  Impact assessment report due to scope change  Organize and schedule change meetings  Update project documents |
| Kotu Chiranjeevi Sneha | | Team Lead | | Me Project scope verification  Impact assessment report due to scope change  Team level change review  Communicate to the team about scope change |
| Nayan Prodduturi | | Team Member | | Active participation in validating the scope changes  Communicate to the manager about the scope change | |
| Solasa Vamsi krishna | | Team Member | | Active participation in validating the scope changes  Communicate to the manager about the scope change | |
| Teja Parimi | | Team Member | | Active participation in validating the scope changes  Communicate to the manager about the scope change | |
| Rakesh Chitturi | | Team Member | | * Active participation in validating the scope changes * Communicate to the manager about the scope change | |

# **Scope Definition**

Scope for this project is defined based on the requirement collection process. All the documents related to requirements including requirement plan, traceability matrix were analyzed to set the scope of the project.

Expert reviews and current transport website requirements and inputs from users and employees were taken in to account to set the scope of the project.

**Scope Verification**

A formal meeting will be facilitated to accept the deliverables between project manager and project sponsor. Project manager will review the deliverables to check whether the deliverables are within the scope and whether they are in accordance with the requirements. In the formal meeting the project sponsor will accept the deliverables by signing the acceptance document.

**Scope Control**

The project team and manger will work together in controlling the scope. Team is responsible for doing the work assigned in the WBS. Any deviation from the assigned tasks should be reported to manager.

**Communication Management Plan:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Communication Type** | **Frequency** | **Participants/**  **Distribution** | **Deliverables** | **Owner** | **Format** |
| Requirements Modification/New Requirements | Bi-Weekly | Program Manager, Project Managers& Business Analyst | Requirement Documents, Revised Project Documentation | Chiranjeevi  Sneha Kotu | Face- Face |
| Weekly Status Reports | Weekly | Project Manager& Team Members | Work Progress on individual tasks/ subtasks based on the Gantt Chart | Mallikharjuna Rao Dande | Email |
| Manager’s Meeting | Monthly | Program, Manager, QA Manager and Project Managers | Individual reports from all the Managers on the Team’s status performance | Nayan Reddy | Face-Face |
| HR Meeting | Bi-Weekly | HR & Project Managers | Tracking report on individual’s performance | Solasa Vamsee Krishna | Email |
| Quality-Assurance Meeting | Weekly | QA Manager, Project Manager and Team Members | Quality report on the applications performance | Teja Parimi | Face-Face |
| Sponsor Meeting | Quarterly | Project Sponsor, Managers and all the team Members | Deadlines, activities, Milestones performance, tentative schedules etc. | Chitturi Rakesh | Video Conference |

.

**Cost Management Plan:**

**Cost Management Plan:**

The project cost management plan is a component of the project management plan that illustrates how costs will be planned, structured, and controlled. Cost management plan ensures that the project will be completed in the approved budget. It introduces the processes how the procedures, policies and documentation for planning, managing, estimating, expending, and controlling the project costs will be established. In this document, the table depicts the total cost estimate for the project. The cost management approach follow the following processes:

**1.1 COST MANAGEMENT PLANNING:**

Planning for cost management is done at the initial stage of the project. It involves planning how to manage the cost throughout the life of the project. The Project manager and stakeholders apply analytical skills and expert advises and conduct meetings in order to create the cost management plan. The cost management plan includes level of accuracy, measurement units, procedure links, rules of performance measurement, control thresholds, reporting formats and process description

**1.2 ESTIMATING COST:**

Estimate Costs is the process of developing an approximation of the monetary resources needed to complete project activities. It explains the procedure what the basis of cost estimation is and provide information how accurate the estimation is, the units of measure used, and risk.

**1.3 COST BASELINE OR DETERMINING THE COST:**

Aggregate the estimated cost of individual activities or work packages in accordance with the WBS and provide information how contingency and management reserve are taken into consideration and define funding requirements. The outputs in this process are project document updates, project funding requirements and cost baseline.

**1.4 COST CONTROLLING:**

It explains how the cost will be measured throughout the project life cycle. In this approach, changes in the project budget will be controlled. If the approach is earned value management, it explains the metrics and the limitations, and define a response to cost variances outside the threshold.

## Schedule Management Plan

1.1 Project schedule model development:

The project’s schedule model Is clearly identified in the work breakdown structure. The estimated durations and dependencies are captured and included in the schedule model.

1.2 Scheduling Model and Tool:

The projects schedule methodology follows critical path to breakdown the work and to estimate slack and longest path to create an optimal schedule. We are using MS Project tool to capture schedules.

1.3 Level of Accuracy and Units of Measurements:

The project schedule is generated to be accurate up to 95% for every task, but buffers are provided for relaxations for contingency purposes. Our basic unit of measurement is in hours.

1.4 Control Thresholds:

Changes to schedules are entertained only under certain situations. One being if the new schedule optimizes the old schedule for more than 5% reduction in overall time frame second situation being when unforeseen situations demand schedule changes.

1.5 Rules of performance measurements:

This project follows the Earned Value Management method to evaluate performances.

Schedule variance, Cost variance, Cost Performance Index, Schedule performance index are used for estimating performance metrics.

1.6 Reporting Formats:

Reports will be shared by project managers containing the weekly progress compared against project schedule and notifies any deviations to all the stakeholders involved.

1.7 Process descriptions:

Each process descriptions are explained along with the process in the work break down structure.

**Work Breakdown Structure:**

|  |
| --- |
| Task Name |
| **Initiation of project** |
| select project manager |
| Selecting Team Members |
| Selecting Project |
| **Planning Phase** |
| Scope Statement |
| Develop project Management Plan |
| **Develop requirement Management Plan** |
| **Collect requirements** |
| Project Requirments |
| Hardware requirements |
| Software requirements |
| Server/Database requirements |
| Requirement traceability matrix |
| Develop time management plan |
| Determine budget and resources |
| **Develop Quality Management plan** |
| Prepare quality check list |
| Prepare quality metrics |
| **Define risk and risk management plan** |
| Develop Risk register |
| **Develop communication management plan** |
| Develop Procurement plan |
| Source selection criteria |
| Procurement document / make-buy decision |
| Final Project management plan |
| **Executing /Implementation** |
| **Design Document of Android App** |
| User Interface |
| Features/Functionalities |
| System outputs/Reports |
| Client review |
| **Montoring and Controlling** |
| Progress Reports |
| Configuration management |
| Change request Management |
| **Closing** |
| Final Project report |
| Final project presentation |
| Sign off-Meeting |

**Change Management Plan:**

The Change Management Plan establishes how changes will be proposed, accepted, monitored, and controlled. The change control procedures identified in the Change Management Plan will govern changes to the baseline project scope including changes to the work breakdown structure and requirements from project inception through to completion. In addition, the change control procedures will govern changes to the baseline schedule and cost. This Change Management Plan addresses the following activities:

The purpose of the change management team is to create a process to ensure the changes in the project management plan are carried out in a specified manner by receiving approvals from all concerned parties to ensure stable updates are allowed into the application and to review any unstable updates sent to production environment.

**CRF:**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Project Information** | | | | | | | |
| **Project Title:** | | |  | | | | |
| **Project Manager:** | | | | | | | |
| **Section 1: Change Request** | | | | | | |
| **Requestor Name:**  **Requestor Phone:** | | **Date of Request:** | | **Change Request Number:**  *Supplied by (PM)* | | |
| **Item to be Changed:** | | | | **Priority:** | | |
| **Description of Change:** | | | | | | |
| **Estimated Cost & Time:** | | | | | | |
| **Section 2: Change Evaluation** | | | | | | | |
| **Evaluated by:** | | | **Work Required:** | | | | |
| **What is Affect:** | | |
| **Impact to Cost, Schedule, Scope, Quality, and Risk:** | | | | | | | |
| **Section 3: Change Resolution** | | | | |  |
| **Accepted Rejected** | **Approved by (Print):** | | **Signature:** | | **Date:** |
| **Comments:** | | | | | |
| **Section 4: Change Tracking** | | | | |  |
| **Completion Date** | **Completed by (Print):** | | **Signature:** | | **Date:** |

## Quality Management Plan

|  |  |  |  |
| --- | --- | --- | --- |
| **S No** | **Defect Level** | **Defect Name** | **Measurements** |
| 1 | High Level Defects | Wrong Estimation, Not assigning work to a right person, Planning errors | Project estimation should be done more effectively and sufficient time should be given to estimate the project.  Project Manager should have a good knowledge of the team members and their capabilities and assign work accordingly.  Care must be taken in the planning phase, so that later surprises are avoided. |
| 2 | Mid-level Defects | Bugs, Integration issues | Bugs are common in any project so proper testing and quality assurance should be implemented.  When modules are combined together and tested on a whole some issues might arise so the testing team should have enough knowledge of all the modules. |
| 3 | Low level Defects | Monitor Resolution, Hard disk specifications | Monitor resolution of the computers might not be good which may not be a huge problem but work can be done better if it is as per the specifications. |

## Risk Management Plan

Risk is defined as an event that has a probability of occurring, and could have either a positive or negative impact to a project should that risk occur. A risk may have one or more causes and, if it occurs, one or more impacts.

The risk in campus tour includes these they are unfavorable environmental conditions like rain, snow may impede the user experience if the user is not paying attention to the road conditions and risks may include user slipping, tripping, sliding and injuring themselves.

### **Risk Mitigation strategies**

|  |  |  |
| --- | --- | --- |
| **Sr. no.** | **Risk Category** | **Risk Mitigation Strategy** |
| 1 | Project Integration Risk | * Have an experienced Project Manager prepare the integration management plan * Involve the team while preparing project integration plan |
| 2 | Cost Risk | * Allocate sufficient reserve for handling cost overruns * Have an experienced Project manager prepare the cost management plan |
| 3 | Executive Support Risk | * Properly Discuss the project with executives and confirm whether they are completely onboard |
| 4 | Scope Risk | * Have an experienced Project Manager prepare the scope management plan |
| 5 | Change Management Risk | * Be clear with clients regarding formal procedures to be followed for change requests |
| 6 | Stakeholder Risk | * Properly Discus the project with stakeholders and confirm whether they are completely onboard * Keep stakeholders engaged by constant communication and meetings with them |
| 7 | Communication Risk | * Engage in team building activities since beginning of the project * Be transparent with the stakeholders regarding progress of the project and difficulties if any |
| 8 | Time Risk | * Have an experienced Project Manager prepare the Time management plan * Design proper WBS |

## Staffing Management Plan

Mallikharjuna is Primary contact and is Responsible to meet the client representing the whole team.

Nayan is responsible for Communications and documentation management. She is responsible to communicate with each and every team member and to document all gathered information.

Teja is responsible for Quality and testing management. He is responsible to test the product and quality till the end of the project from the beginning.

Rakesh is responsible for Data Management. He is responsible to collect, analyze and to distribute the data.

Vamsi Krishna Solasa is responsible for Issues management. He is responsible to communicate with all the team members in order to know if there are any issues in the project.

Sneha Kotu is responsible for requirements management. She is responsible to gather all the requirements from the client Manager.

Mallikharjuna Rao Dande is responsible for Client management. He is responsible to communicate with the client and arrange meetings with the client.

**Gantt Chart:**



**Pert Chart:**

