Life Cycle Plan (LCP)

City of Los Angeles
Public Safety Applicant Resource Center

Team No. 09

Team members and roles:

Vaibhav Mathur	**Project Manager**
Preethi Ramesh	**Feasibility Analyst**
Arijit Dey	**Requirements Engineer**
Shreyas Devraj	**Prototyper**
Gaurav Mathur	**Builder**
Divya Nalam	**OCE**
Rakesh Mathur	**IIV&V**

10/20/2013

Version History

Date	Author	Version	Changes made	Rationale
09/26/13	Vaibhav Mathur, Arijit Dey, Shreyas Devaraj	1.0	• First Draft of the Life Cycle Plan	• To initiate the Life Cycle Planning process and discuss the skills required.
10/12/13	Arijit Dey, Shreyas Devaraj	1.1	• Modification done to Section 2, Section 3.1, 4, 5.	• First Revision before FC Package.
10/20/13	Arijit Dey, Shreyas Devaraj	1.2	• Modification done to Section 3.1, 4, 5.	• First Revision after FC Package which includes the review responses of the stakeholders from ARB session.
10/22/13	Arijit Dey, Shreyas Devaraj	1.3	• Modification done to Section 6.1	• Revision for DC Package.

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1. Introduction

1.1 Purpose

The Life Cycle plan helps the stakeholders to get a clear picture of what are the objectives to be achieved, when are the milestones & deadlines and what are the products which needs to be delivered, what are the responsibilities and what should be our approach towards it, what resources we have and what are the assumptions in regard to this project.

1.2 Status

The present status of the project is at the foundation phase. This LCP presently contains our future plans, updated responsibilities, and milestones to be encountered in the various phases. Also, an estimation of the project using COINCOMO is attached to analyze the project's feasibility within 12 weeks.

1.3 Assumptions

- The system will be readily accepted by the City of Los Angeles Staff.
- There needs to be no integration with the current Application System.
- There is no integration with data of current manual applicant investigation process.

2. Milestones and Products

Overall Strategy

The City of Los Angeles Application Resource Center is an online system which built following the architected agile process as we have to develop the project from scratch with minimum COTS involvement.

Exploration phase

Duration: 09/11/13- 09/26/13
Concept: In the Exploration Phase the team was formed and the project was selected. The current system was analyzed. Team held several meetings to discuss on the requirements & initial scope of the project. The team had also held meetings with its stakeholders to clarify their doubts and establish a win-win state. The team also worked on what are the resources, project plan and skills required for the project to be done which are mentioned in the initial artifacts of the VC Package.
Deliverables: Client Interaction Report. Valuation Commitment Package which includes Operational Concept Design, Life Cycle Plan and Feasibility Evidence Description.
Milestone: Valuation Commitment Review
Strategy: One Incremental Commitment Cycle

Valuation phase

Duration: 09/26/13- 10/16/13
Concept: In the Valuation Phase, the team evaluated the win conditions to develop the operational concepts and implemented the prototype to mitigate major risks. The team had developed the initial prototype using the win conditions. The prototype had the following features of generating automated email to the references, and the reference on getting the email had the ability to click on the link, login using his credentials and fill out the background verification questionnaire.
Deliverables: Draft Foundation Commitment Package which includes Operational Concept Design, Life Cycle Plan and Feasibility Evidence Description.
Milestone: Foundation Commitment Review
Strategy: One Incremental Commitment Cycle

Foundation phase

Duration: 10/16/13- 11/12/13
Concept: In the Foundation Phase, the team will lay the foundations of product development. We need to check the interoperability of using NDI component, understand system architecture, design and test cases. Minimal requirement changes needs to be managed and, the highest priority requirements should be developed.
Deliverables: Foundation Commitment Package which includes Operational Concept Design, Life Cycle Plan and Feasibility Evidence Description and Draft Development Commitment Package.
Milestone: Development Commitment Review
Strategy: One Incremental Commitment Cycle

Development phase

Duration: 11/11/13- 12/02/13
Concept: In the Development Phase, the team will develop the system using the architecture and design mentioned in the operational concepts. The system will be integrated using the modules which are thoroughly tested using unit and integration testing. The team also has to prepare for transition plans, test case and train the support staff to maintain the system.
Deliverables: Development Commitment Package which includes Operational Concept Design, Life Cycle Plan and Feasibility Evidence Description.
Milestone: Transition Readiness Review
Strategy: One Incremental Commitment Cycle

3. Responsibilities

3.1 Responsibilities by Phase

Table 1: Stakeholder's responsibilities

Name: Vaibhav Mathur	
Role: Project Manager	
Exploration	Schedule Meetings, Assign Tasks
Valuation	Plan Project Meeting, Manage Client Interaction, record Project Progress
Foundations	Coordinating Meetings with team members and clients.
Development- Construction Iteration	<<responsibilities>>
Development- Transition Iteration	<<responsibilities>>

Name: Arijit Dey	
Role: Requirements Engineer	
Exploration	Understanding Requirements, Life Cycle Planning
Valuation	Update Life Cycle Plan, Indentify Milestones, Indentify the features to be implemented
Foundations	Maintaining the Life Cycle Plan and keeping it updated.
Development- Construction Iteration	<<responsibilities>>
Development- Transition Iteration	<<responsibilities>>

Name: Divya Nalam	
Role: Operational Concept Engineer	
Exploration	Building the Operational Concept Design Report.
Valuation	Establishing New Operational Concept and Identify the alternative.
Foundations	Implement necessary changes to the OCD and Identify the operational concepts to be developed
Development- Construction Iteration	<<responsibilities>>
Development- Transition	<<responsibilities>>

Iteration	

Name: Preeti Ramesh	
Role: Feasibility Analyst	
Exploration	Checking for Feasibility Evidence and COTS
Valuation	Evaluate NDI and interoperability, Mitigation of Risks
Foundations	Implement necessary changed in the FED, update risks and recalculate ROI.
Development- Construction Iteration	<<responsibilities>>
Development- Transition Iteration	<<responsibilities>>

Name: Shreyas Devaraj	
Role: Prototyper	
Exploration	Project Plan and Progress Report Maintaining
Valuation	Develop the prototype based on top priority requirements & risks.
Foundations	Analyze the win conditions to be implemented, Assist in Life Cycle planning
Development- Construction Iteration	<<responsibilities>>
Development- Transition Iteration	<<responsibilities>>

Name: Gaurav Mathur	
Role: Builder	
Exploration	Building and maintaining Project Website
Valuation	Develop the proposed system using the Architecture.
Foundations	Laying the foundation of development and maintaining Project Website
Development- Construction Iteration	<<responsibilities>>
Development- Transition Iteration	<<responsibilities>>

Name: Rakesh Mathur	
Role: IIV & V	
Exploration	Validation and Verification of COTS Interoperability
Valuation	Analyze Business Cases to Validate the work product, Maintain Bugzilla.
Foundations	Assist to maintain FED, Maintain Bugzilla, Evaluating the development.
Development- Construction	<<responsibilities>>

Iteration	
Development- Transition Iteration	<<responsibilities>>

3.2 Skills

Team members	Role	Skills
Vaibhav Mathur	Project Manager Life Cycle Planner	Current- ASP.Net, C#, Javascript
Arijit Dey	Requirements Engineer Prototyper	Current- JAVA, Oracle 10g, Visual Basic, HTML, UML. Required- C#, MySQL
Shreyas Devaraj	Prototyper Project Manager	Current- JAVA, MySQL, JavaScript Required- ASP.Net, C#
Gaurav Mathur	Builder UML designer	Current-JAVA, C++,MySQL Required-C#
Preethi Ramesh	Feasibility Analyst Requirement Engineer	Current-ASP.Net, C#
Divya Nalam	Operational Concept Engineer UML designer	Current-C/C++, Python Required- ASP.Net, C#
Rakesh Mathur	Validation and Verification of COTS Interoperability	Current- ASP.Net, C#, JavaScript

Note:- None of the team members are planning to continue to take up CSCI 577B.

SKILLS REQUIRED FOR TEAM MEMBERS IN CSCI 577B

- C#
- ASP.NET
- MYSQL SERVER 2008
- DB2

4. Approach

4.1 Monitoring and Control

The team members meet up every week and organize meetings to discuss the project development. The development and project progress are recorded in the Progress Report which is submitted on a biweekly basis. The project report includes lines of code developed, issues, concerns, risk and mitigation plans for the coming week, as well the work done in the previous week. We plan the tasks for the future weeks as well. The tasks are issued to all the team members and monitored using Bugzilla.

Microsoft Project is used to monitor the project plan and track the project progress using the schedule. The project plan includes what all activities are complete, what all tasks to be done and about client and team meeting. Initial issues and deviations are communicated through email and verbally. All the team members are individually accountable for their contributions to the Life Cycle Plan.

4.1.1 Closed Loop Feedback Control

The team exchanges feedback using emails and discuss critical issues in the meetings. Bugzilla tickets are also raised to record and track defects and bugs. This allows all the team members to view, track and finally decide on any open issue. Weekly team meetings and after class mini-team sessions is also conducted. Minutes and agendas of the meetings are recorded for being referred to later.

4.1.2 Reviews

Weekly team meetings are organized to discuss and review documents and issues. The author of an artifact or document emails it to the rest of the member for review and updating.

4.2 Methods, Tools and Facilities

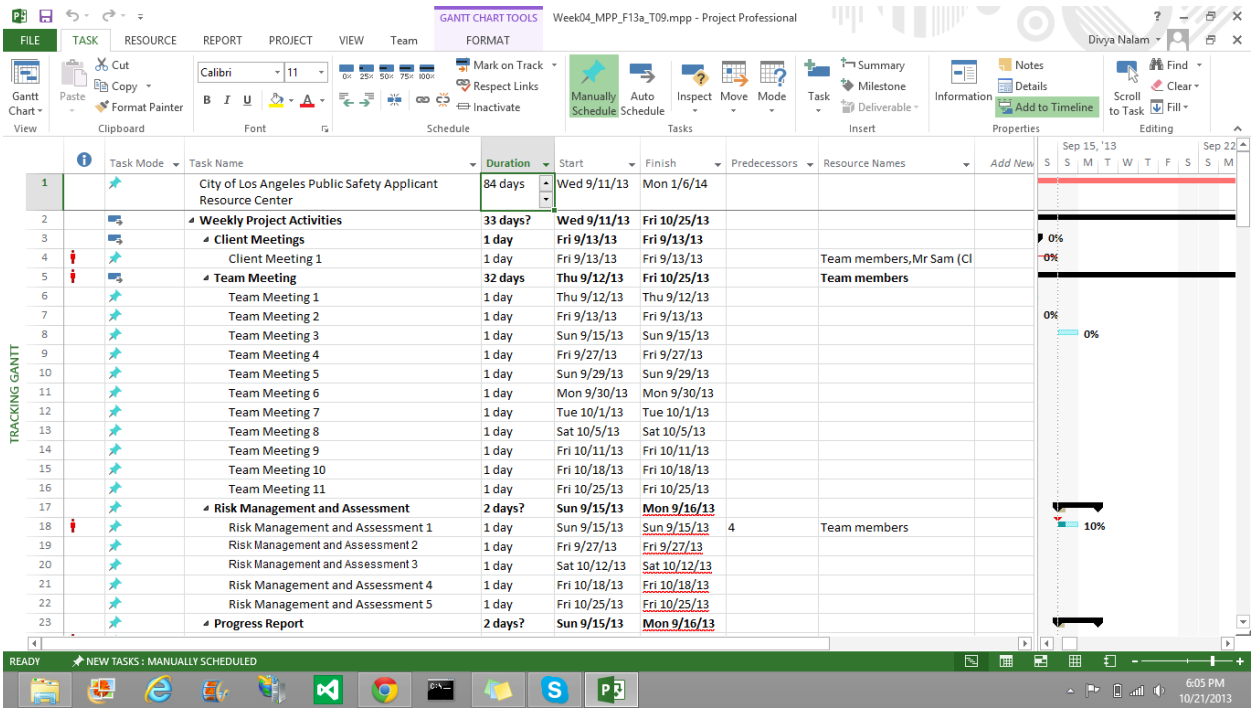
Tools	Usage	Provider
VISUAL STUDIO	Used for development of the project.	MICROSOFT
SQL SERVER 2008	Used as Database for developing Prototype.	MICROSOFT
DB2	Used as Database for developing Project.	IBM

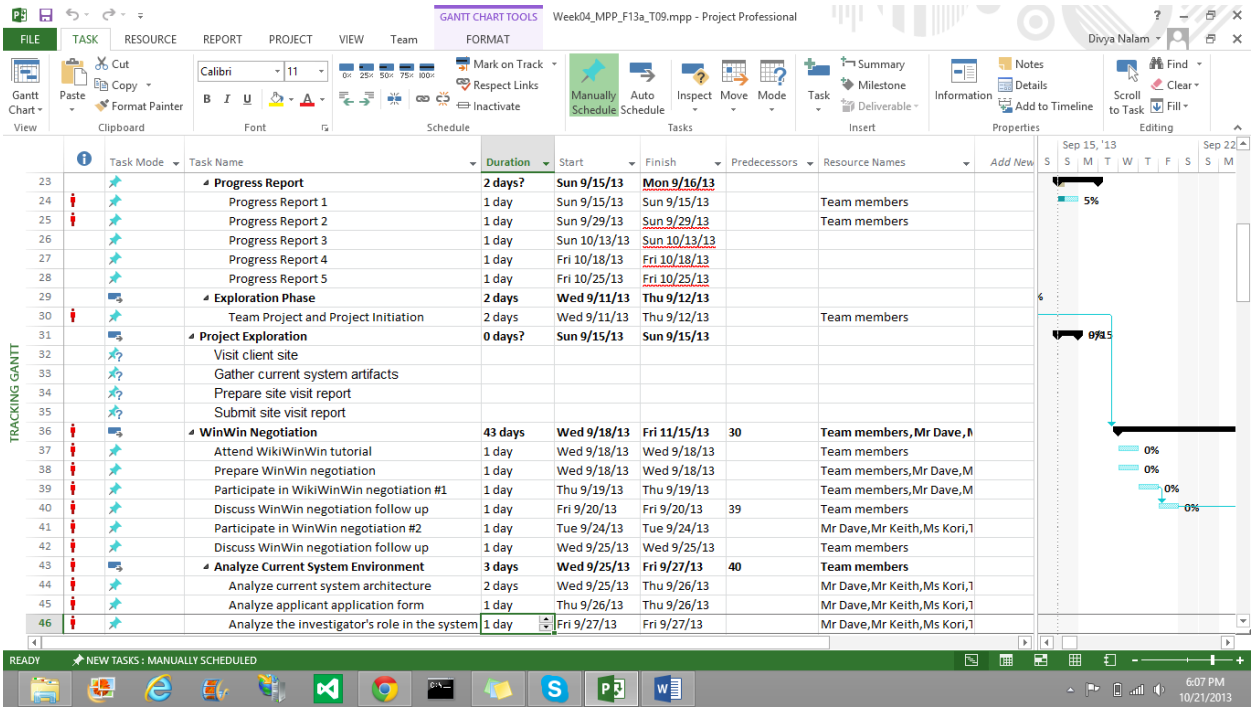
ASP.NET	Framework used to develop the Project.	MICROSOFT
WHATSAPP	Used to communicate minute information between team member.	WHATSAPP

4.3 Project Plan

A biweekly project plan is followed to keep t plans.

The following is our updated project plan as of now.

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23 Progress Report 2 days? Sun 9/15/13 Mon 9/16/13
24 Progress Report 1 1 day Sun 9/15/13 Sun 9/15/13 Team members
25 Progress Report 2 1 day Sun 9/29/13 Sun 9/29/13 Team members
26 Progress Report 3 1 day Sun 10/13/13 Sun 10/13/13
27 Progress Report 4 1 day Fri 10/18/13 Fri 10/18/13
28 Progress Report 5 1 day Fri 10/25/13 Fri 10/25/13
29 Exploration Phase 2 days Wed 9/11/13 Thu 9/12/13
30 Team Project and Project Initiation 2 days Wed 9/11/13 Thu 9/12/13 Team members
31 Project Exploration 0 days? Sun 9/15/13 Sun 9/15/13
32 Visit client site
33 Gather current system artifacts
34 Prepare site visit report
35 Submit site visit report
36 WinWin Negotiation 43 days Wed 9/18/13 Fri 11/15/13 30 Team members,Mr Dave,M
37 Attend WikiWinWin tutorial 1 day Wed 9/18/13 Wed 9/18/13 Team members
38 Prepare WinWin negotiation 1 day Wed 9/18/13 Wed 9/18/13 Team members,Mr Dave,M
39 Participate in WikiWinWin negotiation #1 1 day Thu 9/19/13 Thu 9/19/13 Team members,Mr Dave,M
40 Discuss WinWin negotiation follow up 1 day Fri 9/20/13 Fri 9/20/13 39 Team members
41 Participate in WinWin negotiation #2 1 day Tue 9/24/13 Tue 9/24/13 Mr Dave,Mr Keith,Ms Kori,T
42 Discuss WinWin negotiation follow up 1 day Wed 9/25/13 Wed 9/25/13 Team members
43 Analyze Current System Environment 3 days Wed 9/25/13 Fri 9/27/13 40 Team members
44 Analyze current system architecture 2 days Wed 9/25/13 Thu 9/26/13 Mr Dave,Mr Keith,Ms Kori,T
45 Analyze applicant application form 1 day Thu 9/26/13 Thu 9/26/13 Mr Dave,Mr Keith,Ms Kori,T
46 Analyze the investigator's role in the system 1 day Fri 9/27/13 Fri 9/27/13 Mr Dave,Mr Keith,Ms Kori,T
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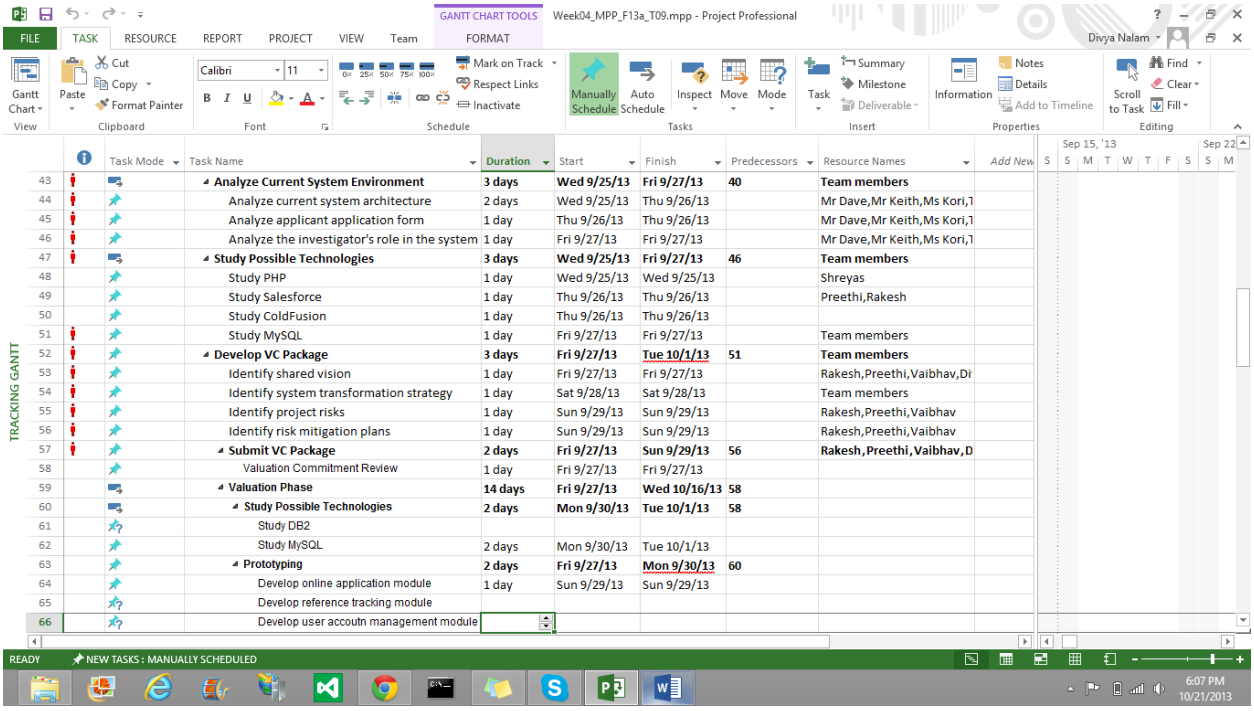
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44 Analyze current system architecture 2 days Wed 9/25/13 Thu 9/26/13 Mr Dave,Mr Keith,Ms Kori,T
45 Analyze applicant application form 1 day Thu 9/26/13 Thu 9/26/13 Mr Dave,Mr Keith,Ms Kori,T
46 Analyze the investigator's role in the system 1 day Fri 9/27/13 Fri 9/27/13 Mr Dave,Mr Keith,Ms Kori,T
47 Study Possible Technologies 3 days Wed 9/25/13 Fri 9/27/13 46 Team members
48 Study PHP 1 day Wed 9/25/13 Wed 9/25/13 Shreyas
49 Study Salesforce 1 day Thu 9/26/13 Thu 9/26/13 Preethi,Rakesh
50 Study ColdFusion 1 day Thu 9/26/13 Thu 9/26/13
51 Study MySQL 1 day Fri 9/27/13 Fri 9/27/13 Team members
52 Develop VC Package 3 days Fri 9/27/13 Tue 10/1/13 51 Team members
53 Identify shared vision 1 day Fri 9/27/13 Fri 9/27/13 Rakesh,Preethi,Vaibhav,Di
54 Identify system transformation strategy 1 day Sat 9/28/13 Sat 9/28/13 Team members
55 Identify project risks 1 day Sun 9/29/13 Sun 9/29/13 Rakesh,Preethi,Vaibhav
56 Identify risk mitigation plans 1 day Sun 9/29/13 Sun 9/29/13 Rakesh,Preethi,Vaibhav
57 Submit VC Package 2 days Fri 9/27/13 Sun 9/29/13 56 Rakesh,Preethi,Vaibhav,D
58 Valuation Commitment Review 1 day Fri 9/27/13 Fri 9/27/13
59 Valuation Phase 14 days Fri 9/27/13 Wed 10/16/13 58
60 Study Possible Technologies 2 days Mon 9/30/13 Tue 10/1/13 58
61 Study DB2
62 Study MySQL 2 days Mon 9/30/13 Tue 10/1/13
63 Prototyping 2 days Fri 9/27/13 Mon 9/30/13 60
64 Develop online application module 1 day Sun 9/29/13 Sun 9/29/13
65 Develop reference tracking module
66 Develop user accoutn management module
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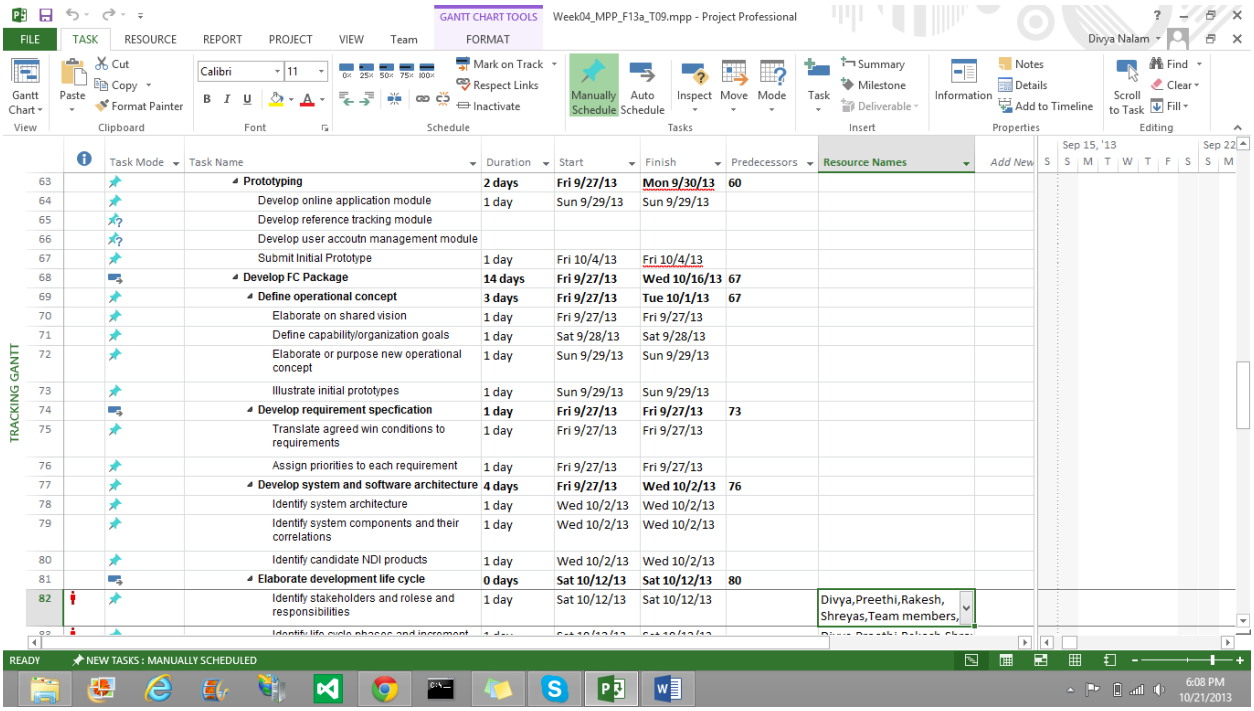
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63 Prototyping 2 days Fri 9/27/13 Mon 9/30/13 60
64 Develop online application module 1 day Sun 9/29/13 Sun 9/29/13
65 Develop reference tracking module
66 Develop user accoutn management module
67 Submit Initial Prototype 1 day Fri 10/4/13 Fri 10/4/13
68 Develop FC Package 14 days Fri 9/27/13 Wed 10/16/13 67
69 Define operational concept 3 days Fri 9/27/13 Tue 10/1/13 67
70 Elaborate on shared vision 1 day Fri 9/27/13 Fri 9/27/13
71 Define capability/organization goals 1 day Sat 9/28/13 Sat 9/28/13
72 Elaborate or purpose new operational concept 1 day Sun 9/29/13 Sun 9/29/13
73 Illustrate initial prototypes 1 day Sun 9/29/13 Sun 9/29/13
74 Develop requirement specfication 1 day Fri 9/27/13 Fri 9/27/13 73
75 Translate agreed win conditions to requirements 1 day Fri 9/27/13 Fri 9/27/13
76 Assign priorities to each requirement 1 day Fri 9/27/13 Fri 9/27/13
77 Develop system and software architecture 4 days Fri 9/27/13 Wed 10/2/13 76
78 Identify system architecture 1 day Wed 10/2/13 Wed 10/2/13
79 Identify system components and their correlations 1 day Wed 10/2/13 Wed 10/2/13
80 Identify candidate NDI products 1 day Wed 10/2/13 Wed 10/2/13
81 Elaborate development life cycle 0 days Sat 10/12/13 Sat 10/12/13 80
82 Identify stakeholders and rolese and responsibilities 1 day Sat 10/12/13 Sat 10/12/13 Divya,Preethi,Rakesh, Shreyas,Team members,
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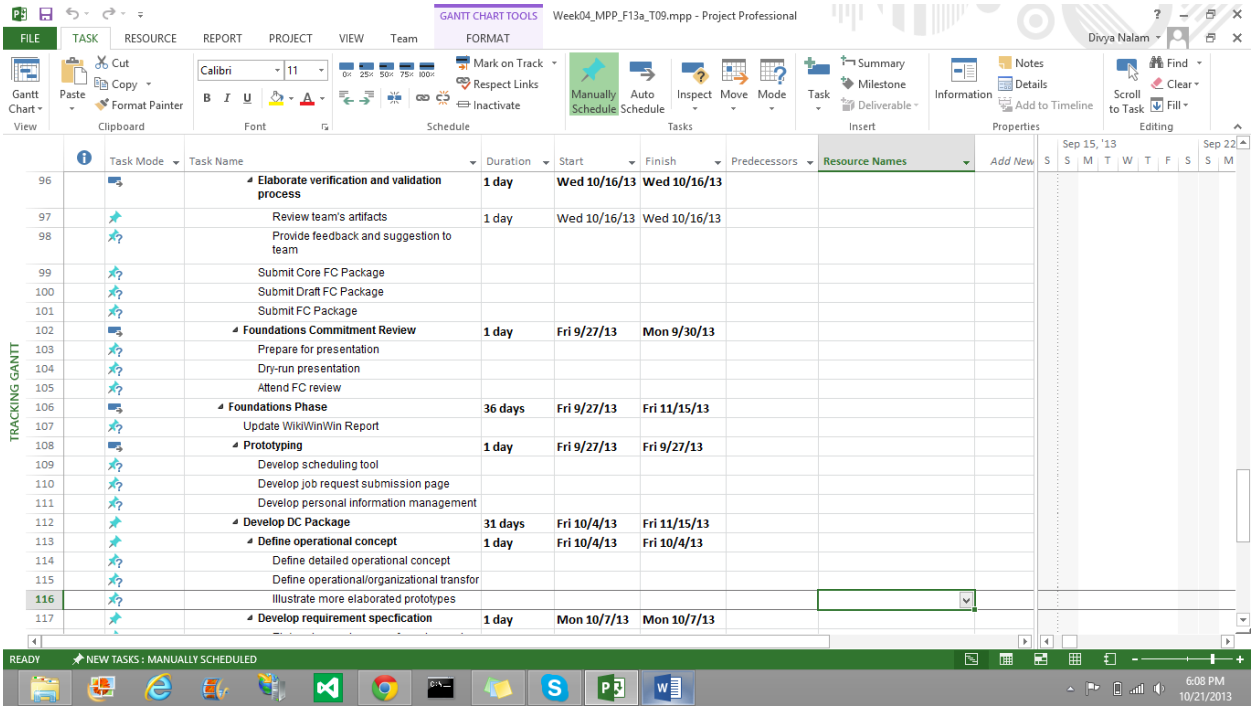
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96 Elaborate verification and validation process 1 day Wed 10/16/13 Wed 10/16/13
97 Review team's artifacts 1 day Wed 10/16/13 Wed 10/16/13
98 Provide feedback and suggestion to team
99 Submit Core FC Package
100 Submit Draft FC Package
101 Submit FC Package
102 Foundations Commitment Review 1 day Fri 9/27/13 Mon 9/30/13
103 Prepare for presentation
104 Dry-run presentation
105 Attend FC review
106 Foundations Phase 36 days Fri 9/27/13 Fri 11/15/13
107 Update WikiWinWin Report
108 Prototyping 1 day Fri 9/27/13 Fri 9/27/13
109 Develop scheduling tool
110 Develop job request submission page
111 Develop personal information management
112 Develop DC Package 31 days Fri 10/4/13 Fri 11/15/13
113 Define operational concept 1 day Fri 10/4/13 Fri 10/4/13
114 Define detailed operational concept
115 Define operational/organizational transfor
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117 Develop requirement specfication 1 day Mon 10/7/13 Mon 10/7/13
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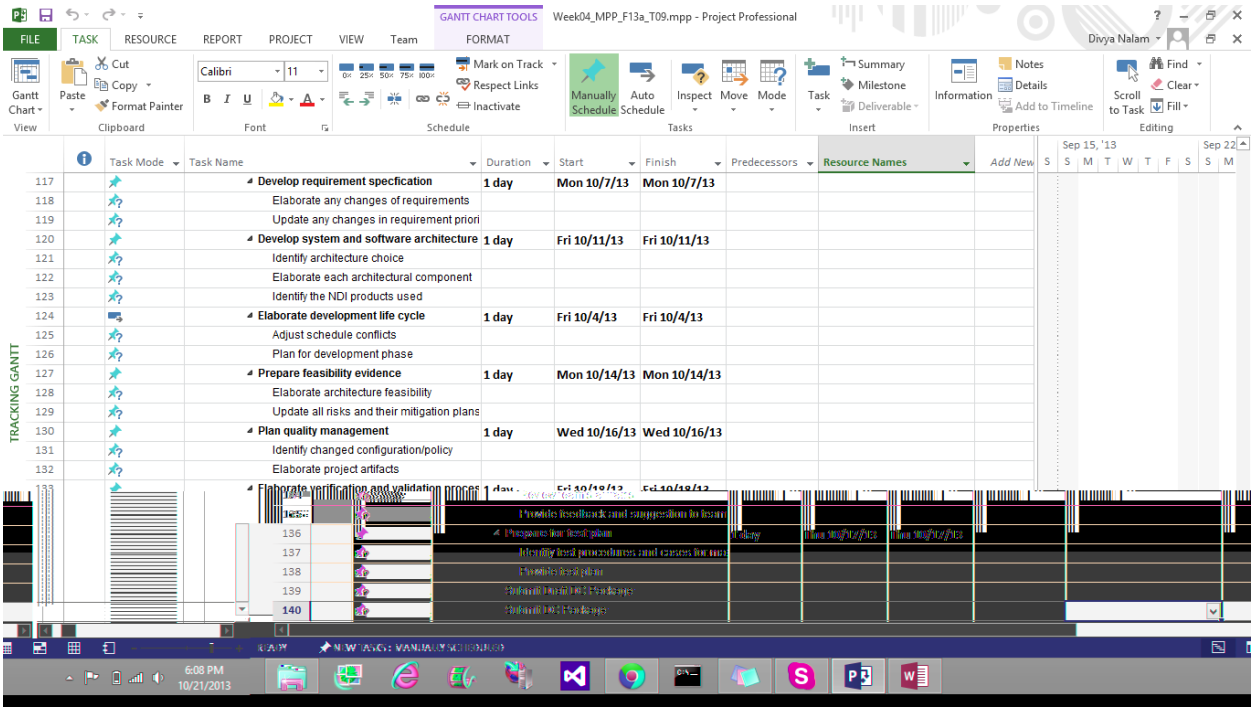
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117 Develop requirement specfication 1 day Mon 10/7/13 Mon 10/7/13
118 Elaborate any changes of requirements
119 Update any changes in requirement priori
120 Develop system and software architecture 1 day Fri 10/11/13 Fri 10/11/13
121 Identify architecture choice
122 Elaborate each architectural component
123 Identify the NDI products used
124 Elaborate development life cycle 1 day Fri 10/4/13 Fri 10/4/13
125 Adjust schedule conflicts
126 Plan for development phase
127 Prepare feasibility evidence 1 day Mon 10/14/13 Mon 10/14/13
128 Elaborate architecture feasibility
129 Update all risks and their mitigation plans
130 Plan quality management 1 day Wed 10/16/13 Wed 10/16/13
131 Identify changed configuration/policy
132 Elaborate project artifacts
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