MODELLING OF FLIPKART

A Software Engineering Project
Version 2 | 23rd April, 2014

By

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<u>REFERENCES</u>

The Reader should read this document in conjunction with the following documents:

S. No	Document Name	Version
1	Project Proposal Document	1.1

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PURPOSE OF THIS DOCUMENT

This document captures the major milestones to be achieved in the course of the project. It will serve as a guiding document to follow each of the project activities as per plan and also to assess progress of the project as per the set objectives.

SCOPE OF THIS DOCUMENT

This document includes all the important aspects of the project including the context and objectives of the project, members involved in the project, the activities that have been planned in the project, estimated time for the completion of the activities as well as the entire project. This document also enumerates all the testing strategies that have been planned to ensure the quality and performance of our project.

PROJECT ABSTRACT

Flipkart is a website that facilitates online shopping. The customers may shop with the help of their registered Flipkart account or without it by using their email ID. Some of the main features that highlight Flipkart are Cart, Place Order, Account Management, Wallet, Return Order, Browse through the products as an analogous user- until login/asked for email for purchasing items, etc. another vital feature of the site is its ability to use some of the most recent technologies- RESTful Web Services. The whole objective of our project is to implement some of the vital features of Flipkart so as to model the functioning of this site to some extent and to incorporate the use of certain RESTful web services that it uses- such as login into this site using Facebook login and other additional services using this technology. Our modeled system will be deployed using Google App Engine.

REST defines a set of architectural principles by which you can design Web services that focus on a system's resources, including how resource states are addressed and transferred over HTTP by a wide range of clients written in different languages. If measured by the number of Web services that use it, REST has emerged in the last few years alone as a predominant Web service design model. In fact, REST has had such a large impact on the Web that it has mostly displaced SOAP- and WSDL-based interface design because it's a considerably simpler style to use.

PROJECT MEMBERS DETAILS

This section provides the details of the team members of the project.

Project Mentor:

1. Prof. KV Dinesha, International Institute of Information Technology, Bangalore.

Team Members:

1	Paras Mittal	MT2013097
2	Ankit Narang	MT2013014
3	Nikhil Agrawal	MT2013090

ACTIVITY LIST

Since, our OOAD project has been extended as our SE Project, our System was developed into two project:
1) Modeling and developing a replica of Flipkart using Struts 2 framework- A part of OOAD Project.
   2) Extending RESTful web services that can be used by our Flipkart and deploying the entire project in Google App Engine.

S.NO	PROJECT PHASE	PROJECT ACTIVITY	RESPONSIBILITY TAKEN BY	START TIME	END TIME
1	Formulation of the problem	**Reading Relevant Background Info**	Paras Mittal , Ankit Narang	**1st March, 2014**	**4th March , 2014**
		Understanding & documenting The requirements		**5th March, 2014**	**6th March**
		Discussion		**6th March, 2014**	**6th March , 2014**
2	Designing a solution, documentation	Dividing our Selected usecases among the group	Login/Sign Up, A/c Management: Nikhil	**6th March, 2014**	**6th March , 2014**

		members.	Wallet, Recommendation: Ankit		
		Project Documentation	Login/Sign Up, A/c Management: Nikhil Wallet, Recommendation: Ankit	**7th March,2 014**	**10th March , 2014**
3	Relevant learning	Struts2 Framework + JSP	Paras , Ankit Nikhil	**17th Jan, 2014**	**2nd Feb, 2014**
		(implemented a mini Project- **System Info Sys**) RESTful Web Services + Getting acquainted with Google App Engine		**Expected by 10th May2014**	**Expect ed by 17th May,2 014**
4	Coding and unit testing	To implement 4 RESTful Web Services that will be used by our Flipkart + unit testing	Work to be divided mutually among Paras and Nikhil	**Expected by 18th May, 2014**	**Expect ed by 28st May, 2014**
		Integration of all code		**Expected by 29th** **May,**	**Expect ed by** **3rd**

					2014	June, 2014
5	Documentation	Flikart Documentation + RESTful Web Services	Work to be divided mutually among Nikhil and Ankit	**Expected by 4th June, 2014**	**Expected by 11th June, 2014**
6	Testing	Integration Testing & System Testing	Paras Mittal	**Expected by 12th June, 2014**	**Expected by 14th June, 2014**
7	Reviews	Among Group Members	Paras , Ankit Nikhil	**Expected by 15th June, 2014**	**Expected by 16th June, 2014**
		With Mentor	Paras , Ankit Nikhil	**Expected by 18th June, 2014**	**Expected by 19th June, 2014**
8	Re-work and de-bugging	**Whatever required after receiving final reviews from the Mentor**	Paras , Ankit Nikhil	**Expected by 20th June, 2014**	**Expected by 30th June, 2014**

PROJECT PLAN

1. ***Problem Identification***: This phase requires us to understand the system by identifying various usecases and actors of the system. This phase consists of various sessions of discussions between us and our Project Supervisor. At the end of this phase, we will be ready with the System's Documentation that summarizes the usecases considered for our system and their actors who interact with these usecases.

2. ***Developing the understanding of the technologies needed:*** This phase motivates self study and to get a gist of the technology-RESTful Web Services and understand this technology in its depth.

3. ***Designing Database System:*** We will be designing and handling the Database System for our Software System. We will be classifying all the properties of the usecases and these will be served as attributes for our tables of our Databases.

4. ***Distribution of the Usecases:*** After the above steps, we will be distributing the work among our project group members.

5. ***Charting the overall flow of events of our system***

6. ***Designing Web Pages:*** We will be focusing upon the View part of our System that will be displayed to the user. The representation will be primarily be in JSP.

7. ***Designing Business Logic:*** The backend of the system's interaction with the user or within its own will be descriptively coded in Java. Handling (in terms of fetching, creation, deletion and updating) values from the databases and then using these values to write the functionalities for each of our usecases will be focused upon.

8. ***System Integration:*** This will focus on the integration of the codes according to the designed flow of events in our Software System.

9. ***Testing:*** Our system will be tested upon certain parameters both by our group and our Project Supervisor/Mentor.

TESTING STRATEGY

Test Activity (in no. of hours)	Responsibility taken by	Estimated Time (in no. of hours)	Path
Preparation of Test Cases	Paras , Ankit Nikhil	45 hrs	https://github.com/paras/SE Project
Unit Testing	Paras , Ankit Nikhil	44 hrs	https://github.com/paras/SE Project
Integration & System Testing	Paras , Ankit Nikhil	60 hrs	https://github.com/paras/SE Project