Design Phase Document

GROUP #3 – Motel Management System

16. Darsh | 11. Bakul | 17. Keerthi | 9. Mohan | 15. Nidhi

The general process of designing and developing a Web-based application is not significantly different from that for any software product. Before the project commences, it is important to assemble a good team that will be able to work well together throughout the project life cycle

Team-Based Methodology

Here is the list of available team members along with their role for the project:

Developer:

Assist in finalizing data conversion strategy; review of the architecture and software components.

Name

- Mohan Murthi
- Bakul Ahluwalia

Database Administrator

The role may include capacity planning, installation, configuration, database design, migration, performance monitoring, security, troubleshooting, as well as backup and data recovery.

Name

- Sree Keerthi
- Nidhi Parikh

Graphic Designer

The Graphic Designer determines the look and feel, constructs the layout, and generates backgrounds, control

Name

- Darsh Parikh
- Bakul Ahluwalia

Production

The purpose of this role is to integrate and maintain content, ensuring that, among other things, palettes and formatting are consistent.

Name

- Bakul Ahluwalia
- Nidhi Parikh

Quality Assurance

Quality Assurance role makes sure that product development is progressing according to the requirements specification

Name

- Sree Keerthi
- Nidhi Parikh

User Interface Designer
The User Interface Designer works closely with the User to build a product that is easy to understand and simple to operate.

Name

- Darsh Parikh
- Mohan Murthi

Team Lead
Team Lead role is the least glamorous of the lot, and involves maintaining the schedule, dealing with customer requests, enforcing the use of source code control and other software programming practices.

Name

- Darsh Parikh

Development Cycle

The development cycle of Motel Management System is not significantly different from that of any client/server application. For our project, it was difficult, and frequently not desirable, to proceed in a linear fashion from prototype to design, and from design to implementation. The prototype may need to be modified as the design process uncovers weaknesses; a portion of a design may need reworking and develop again when an idea is found to be technically not feasible to implement. Hence, we decide to follow the **Agile Model** of Development life cycle to accomplish our project.

Agile Model

Agile SDLC model is a combination of iterative and incremental process models with focus on process adaptability and customer satisfaction by rapid delivery of working software product. Agile Methods break the product into small incremental builds. These builds are provided in iterations. Each iteration typically lasts from about one to three weeks. Every iteration involves cross functional teams working simultaneously on various areas like −

- Planning
- Requirements Analysis
- Design
- Coding
- Unit Testing and
- Acceptance Testing.

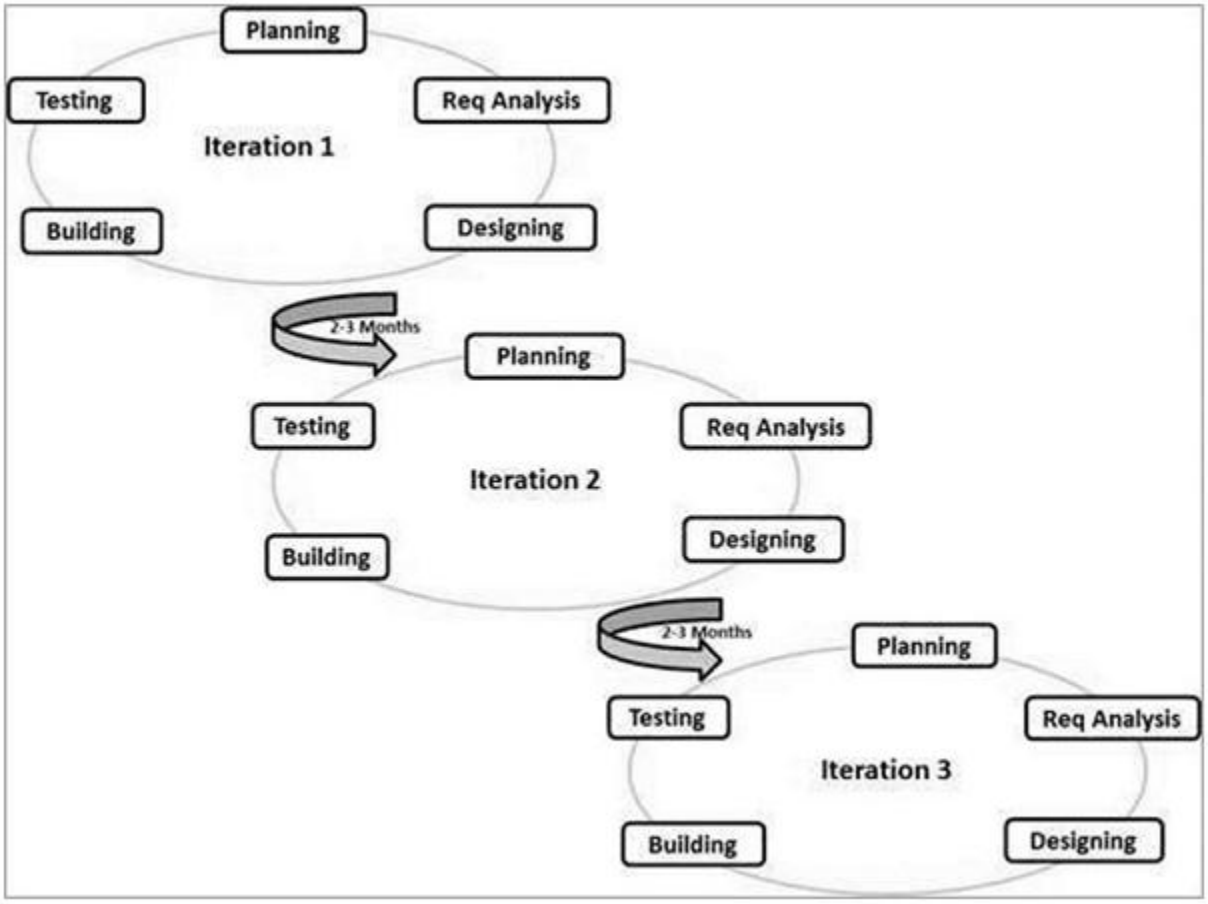
At the end of the iteration, a working product is displayed to the customer and important stakeholders.

What is Agile?

Agile model believes that every project needs to be handled differently and the existing methods need to be tailored to best suit the project requirements. In Agile, the tasks are divided to time boxes (small time frames) to deliver specific features for a release.

Iterative approach is taken and working software build is delivered after each iteration. Each build is incremental in terms of features; the final build holds all the features required by the customer.

Here is a graphical illustration of the Agile Model –



Works to Be Completed During Design Phase

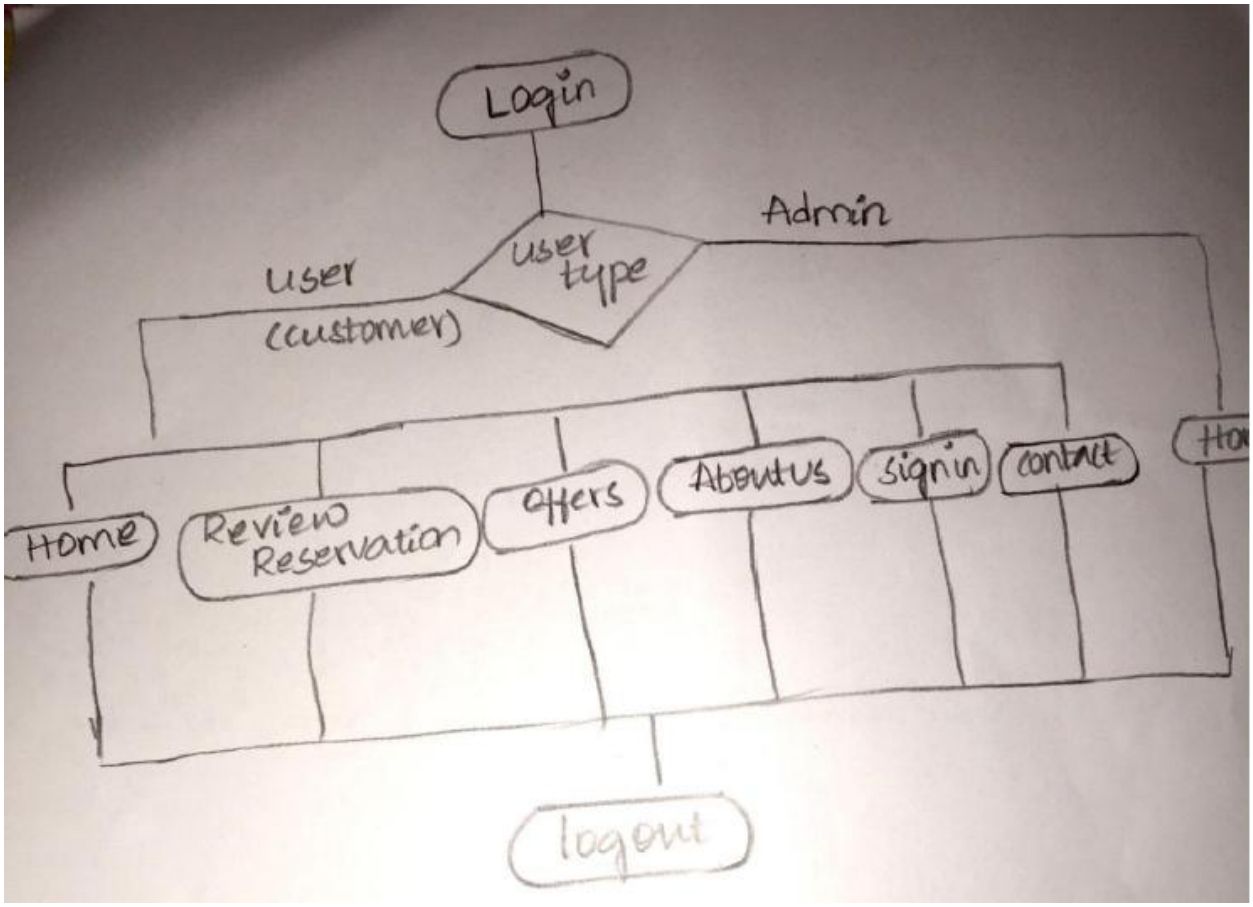
The design of a dynamic Web application proceeds along three closely related paths.

- Working from the prototype, the user interface should be refined to approximate its anticipated final state. This includes determining the navigational flow (storyboard) between the HTML pages comprising the site, specifying any required input and output mechanisms such as buttons or forms, constructing the page layout, and designing final artwork.
- Database design should commence during this phase as well for applications that are not interfacing with legacy data. This includes defining tables and indexes and designing stored procedures, all with an eye to optimal data throughput for the application.

- Bridging the gap between the HTML pages and the database is the design of the server-side script code, which specifies where and how database interaction should occur within the documents.

Flow chart of application

In this application initially Default.aspx page that means login page appears. After login then it will navigate to either customer home page or admin home page according to the login credentials.



Development

Implementation activity closely parallels design activity. Using the prototype as a base, the ASP.NET pages will be edited to incorporate final artwork and any user interface changes will so be specified during the design phase. The database will be created as it is necessary, and stored procedures will be implemented. Server-side script code will be written and integrated into the ASP.NET pages. Testing will also begin when it is feasible.

Deployment

The culmination of the application development cycle is its deployment in a production environment and release to the public. This is a fundamentally different activity from the other phases of the process.