Technologies to be used in this project

After doing some research on the current technologies and studying current projects, the team decided to go with ASP.NET framework. The system will be an ASP website with C# as code-behind language. The following list gives a brief idea of the technology stack that we would be using for development and deploying the application on the internet.

* User Interfaces: - A simple UI is what attracts users to the website. Keeping the design aesthetics in mind, we have planned to go with the following technology to build a rich user interface.
  + jQuery Interface
  + CSS3 Animations
  + Responsive Interface
  + Angular/React Application interface
  + React Native application interface
* Databases: - Each website has a unique database which stores all the user information and interacts with the user interface to provide information requested by the user. In our application, since, we are using ASP.NET framework, configuring SQL Server is an easy process. We would be using SQL Server 2012 or SQL Server 2014 as the database for the application. Database will be initially installed in our own machines, and later on, will be hosted on the deployment server.
* Server Technologies: - Server side is the heart of any web project. The more the server technologies used, the more the application becomes robust. We decided to add following server technologies.
  + Facebook Integration
  + Email Integration
  + One Time Password Authentication
  + SMS Integration
* Service Integration: - After doing research, we found that, some of the similar websites lacked any other service integration. If the user forgets username/password, the user had no other option but to reset it’s username/password. Considering the amount of time it takes for the user to go through the process, we decided to add a feature where the user could login through any social media platforms. We decided to give a choice of following types of user login options.
  + Facebook Login
  + Google Login
  + Our own Login

The website would be storing all the types of payment methods used by the user for payment of the services requested. In order to keep those safe, we have decided to provide user with options where the user could choose the type of authentication service needed. The website would be providing authentication service as

* Google Authentication Service
* Text Message Authentication Service
* Email Authentication Service
* Deployment: - After successful completion of the application, the application would be hosted on the server provided by [SmarterASP.NET](https://www.smarterasp.net/) servers.
* Testing: - Testing is an important phase of the application development and it helps uncover errors, bugs. The application will be unit tested thoroughly. Apart from this, we would be doing integration testing as well to check if for any errors generated after integrating modules.

Team Members

The website application will be developed and deployed by

* Yash Ravindra Ganorkar
* Shruti Sidramayya Puranik

Timeline

|  |  |
| --- | --- |
| WEEK | EXPECTED TASK |
| 1 | Submission of Project Plan. Start looking for appropriate templates. Start designing UI. |
| 2 | Start developing RESTful API communicating with the server. Plan database tables. |
| 3 | Start developing login pages and test for successful as well as unsuccessful logins. Start designing UI for Hotels, Flights, Trains and Car bookings. |
| 4 | Start developing backend logic in C# for booking cars and flights. |
| 5 | Midterm Goal (Deploy application on server and demonstrate logging in and booking cars and flights). |
| 6 | Start developing backend logic for Hotel and Train bookings. |
| 7 | Start developing backend logic for local events. |
| 8 | Unit Testing application |
| 9 | Fixing bugs reported from Unit Testing |
| 10 | Integrate authentication modules |
| 11 | Work to improve user interface |
| 12 | Perform integration testing |
| 13 | Deploy the application on the server. Check for any application errors and fix those. |
| 14 | Submit project. Generate documentations. |
|  |  |

Version Control System

In order to have backups for the code, we would be using Github where all the commits would take place. The URL for the repository is [Travelopedia](https://github.com/yash-ganorkar/travelopedia).