Project Scope

Project Description:

Plan My Trips is a smart travel guide which helps to personalize your trip by picking your favorite place, booking flight/bus/train tickets, hotels, restaurants and events and book them all from our application.

Our project focuses on providing the centralized system which provides all the information that can be used by the tourist to organize their trip.

There are limited technologies used in this sector to address number of problems like booking for accommodation, retrieving different events based on the location, navigating to the tourist spot and booking the tickets all in single application. Tourists usually face problem finding all the features in a single application.

Some of the problems faced by the audience are booking flight, hotels, cars, restaurants from different applications and managing the trip by printing emails for every flight, hotel, restaurants that they reserve. Choosing a right application can be as confusing as deciding on where to stay and how to get there. Getting proper reviews about the places and regarding the events in the specific location.

Our application would solve most of the problems like providing a single itinerary for the complete trip and adding the details to the user calendar and get to select better places to visit.
Our business solution follows required programmed behavior in each of the three tiers of the standard web system design where we maintain a database which includes the traveler information and the data about the flight, hotels, restaurants, events.

Our project focuses on providing a well-designed responsive user interface for the client where user can login using Facebook/Google/our site. User can look for the flight, hotel, restaurants and they can book based on the price, location, reviews. Our application helps the user to make a better choice in booking. Our application helps the user to maintain all the details under a single roof. A user can just login into the app and he can access complete travel details.

User details will be saved in the database our application will be designed based on web services. To do this, we crawl data from open content source like Eventbrite, Google flights and many more. With an internet connection a user can login and use all the features provided by the application.

Use Case

Plan My Trips is a website made for travelers and explorers. It is a website which not only allows users to book a travel ticket, but also provides upto date information about the events which would be taking place into their destination city during their stay.

Whenever the user decides to book the tickets, the user would visit our website. The website would have options like Bus/Train/Flight/Rental Cars tickets to book. The user would enter details like name of the source and destination cities, time and date of travel and number of adults as well as senior citizens. Once the user enters this data, the user would be provided with the list of buses/train/flight that run between the source and destination along with the prices. The user would select one of the quote and start the booking process. Now, in order to save the user's history and credit card details, the user would be prompted to sign in into the website either by using Google/Facebook/Our own website login credentials. Once the user logs into the system, the user would enter the credit card details and then book the tickets using Stripe/Braintree. As soon as it books the tickets, a confirmation email would be sent to the user with the ticket details either in the body or as a PDF.

After booking the tickets, the user can book Rental cars from the same website or post a status update on Facebook/Twitter. User can also check for the weather at both the cities for the date of departure and arrival. Users can check for famous landmarks at the destination city and list of events along with booking details for the same. User can maintain all the details under a single itinerary. A user can just login into the app and he can access complete travel details.

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 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
- ShrutiSidramayyaPuranik

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 Plan My Trips.

Blogpost

Latest updates and blogs are found at Plan My Trips.

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. Look for APIs which could show weather data to the service users.
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.
