ITMD567 – Web System Integration

The Web application I will be building is to basically bridge the gap between the Needy and the people who want to help.

The Motto of the Application will be "If you have some extra money help someone and make a difference in their life".

In my Home country (India) people want to help not only in the form of money, they are ready to donate clothes and food too. There are organizations who collect left over food from events and give it to Orphanages. But to reach out to them you need call them and their numbers and organization details are not easily accessible. In this app they not only can donate money they can express that they want to donate food and clothes too.

There will be 2 main Users in the application who are, the people who want to Donate and help others and on the other end NGO's Which work for the poor, Orphans, homeless and old people. These NGO's can give back to the people by sending them things made by them or uploading pictures on how the people are getting benefitted by this.

The Web Application will have the technologies from the MEAN Stack,

Mongo, Express, Angular, Node. And the application will be hosted on AWS EC2 Instance.

Use Cases:

- 1.) The Donor and NGOs can register and create an account either directly or through Facebook or Gmail. He can see a list of Ngo's to whom he can donate. He can view the NGOs Profiles and vice versa.
- 2.) The Donor selects an NGO and can contact them through direct messages as to understand how they make use of the money. And what are the problems faced by them.
- 3.) The NGOs can respond to the messages from the Donors and show them proof of how they are utilizing the Money by uploading pictures on their homepage etc.,
- 4.) The NGOs can even make their case stronger by giving something back to the people who have helped them in funding. They can advertise about this when someone checks the profile of the NGO.
- 5.) Registered NGOs can have a direct link for our application at their fb home page where users will be redirected to our application once they agree to use our app just like any other apps and the User should be directly taken to the home page of the NGO in the App.
- 6.) If the User Intends to Donate clothes and food he can send a broadcast email to nearby organizations and whoever responds first can communicate with him to claim it and take it to their organization.

- 7.) Users and NGOs have the option of adding reviews on each other. This is a benefit for the User because he can see which NGOs have been responding well and which are not.
- 8.) NGO Can start Fund Raising events on their Homepage and share it on Facebook. People can pitch in money for the Fund Raiser event.

Technologies to be implemented.

JavaScript and its frame works like Angular, Express, Node.

Responsive Interface using bootstrap.

Location technology. – GeoLocation API

Mongo DB for the Database operations.

AWS EC2 to be used as the cloud server.

Facebook Integration Using Passport.js

Stateless Token Authentication. – JSON Web tokens (JWT)

File Uploads.

MongoDB.

Google Login. – Passport.js

Deployment on Amazon EC2 cloud.

Unit/Integration testing of the User Interface.

Payment Gateway – Paypal Integration

Team Members.

Vasuki K kaushik - A20370267

Project Timeline.

1st Week (9/17) - Initial Design plan, No. of Screens, backend User Setup.

 2^{nd} Week (9/24) – Login pages and landing pages for Donors and NGOs.

3rd Week (10/1) – Google Login and Facebook integration and End to end User test.

 4^{th} Week (10/8) – NGO Picture and event uploads to their Homepage.

5th Week (10/15) – functionality where the Donor users have a broadcast option to donate food or clothes and all the nearby NGOs will get notified by email.

6th Week Mid project (10/22) – Payment gateway using PayPal Integration and Mid-Project Check-in.

7th Week (10/22) – Implementing responsive design and framework using bootstrap and Deployment to cloud EC2 Instance.

8th Week (10/29) – Users and NGOs can add reviews, Comments and give star ratings for one another just like Uber.

9th Week (11/5) – Categories of NGOs. Who can start fund raisers and donors can pool money into it.

10th Week (11/12) – NGOs can advertise handmade stuff made in their Ngo which they can sell in their Home Page.

11th Week (11/19) – Direct messages Integration between Donor and NGO in the App.

12th Week (11/26) – End to End testing

13th Week (12/03) – Stretch Goals. – Analytics for the Fund-raising events on further details like the amount of money pooled etc.,

14th Week Final Goal (12/10) – Submission of the Project.

Dev Blog:

https://vkaushik1project.wordpress.com/