

Knowledge Discovery and Management

Project Phase – I Report

By

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Blogger Locale

Introduction:

Blogger Locale is an online blog which provides a smart way of posting articles, promotions, questions and all types of software related enquiries. Latest technological improvements, new ideas can be shared with different people. People can get aware of social issues; new languages can be others.

Human right groups, NGOs needs a medium to interact with the people to create social awareness of a social cause, our bog will help them to reach huge number of people online. One can use our blog to communicate with their friends and families. People will use to have fun and to be creative.

Project Goals and Objectives:

Here in our project we are going to design a blog which helps the people to share their knowledge. Our main objective is to make it more user friendly by inclusion of some interesting NLPs which will help the people to raise the questions from the already available ones. People can filter they needs based on the tags we provide.

Users can register themselves and can customize their profiles according to their interests. People can comment on the post already been online and can get feedback for that.

We are going to use most popular framework, bootstrap to implement HTML, CSS and JS for developing responsive, mobile first projects on the web i.e., we can even operate this blog from the mobile devices, tablets which makes it more convenient.

Objectives:

1. Make it available both on we as well as on the mobile platforms.
2. Designing a better looking User Interface.
3. Usage of NLPs for suggestions to the user posts.

System Design:

We are designing a three tier architecture which contains front end, business layer and database layer.

Front End:

This layer provides and Graphical User Interface, through which the users can operate and can request for information and can visualize the results.

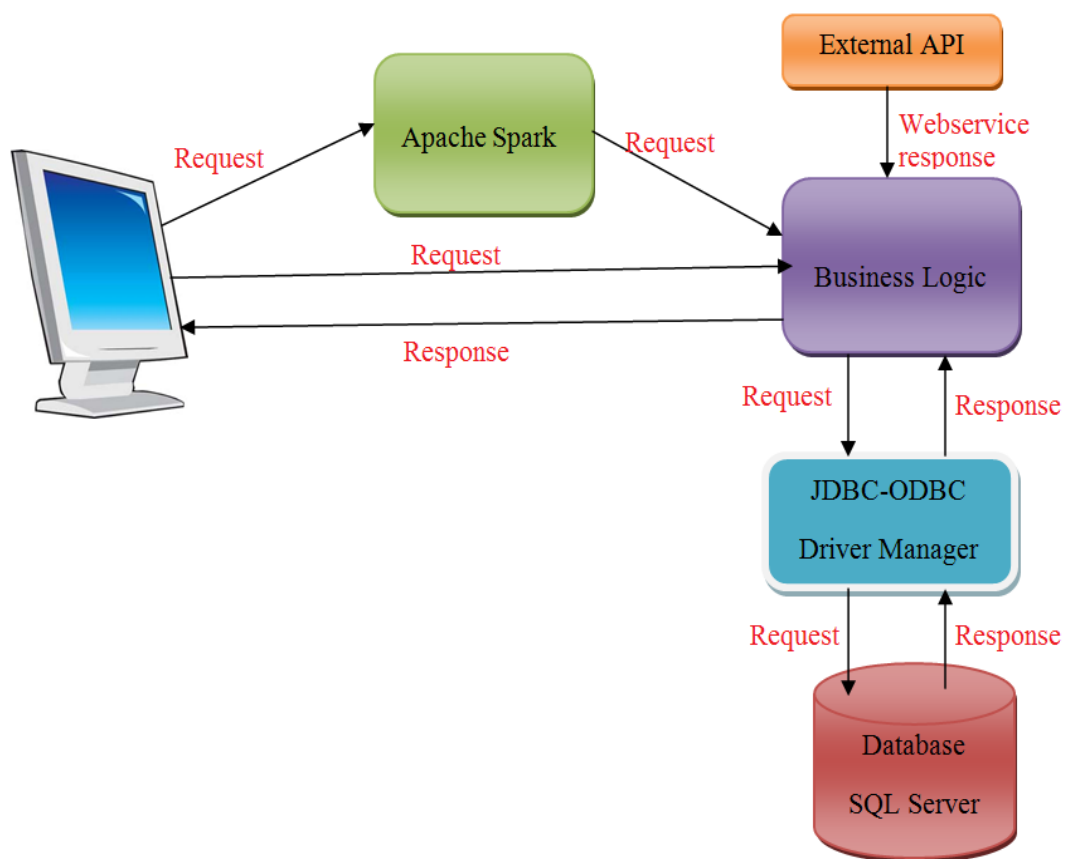
Business Layer:

This layer contains all the business logic and functionalities that validates, updates and control the data through and out of the database.

Database Layer:

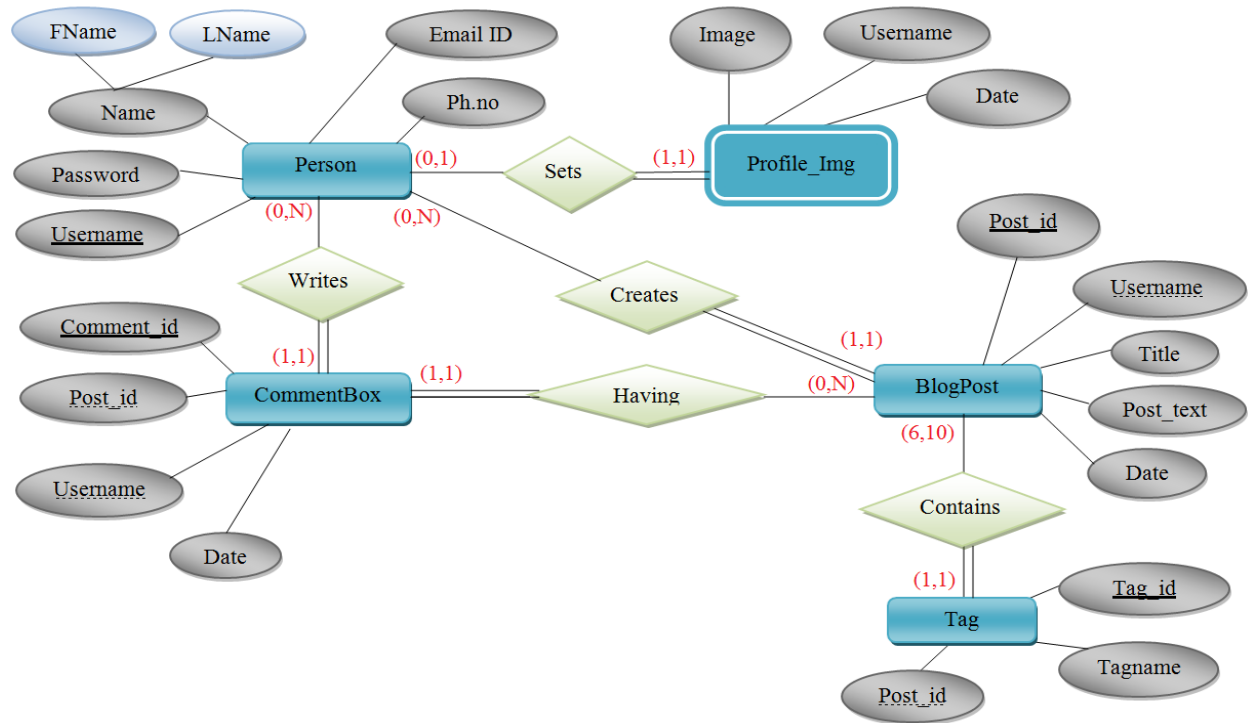
This layer acts as a storage unit for the Blog which can store and retrieve data as per the request from the user and as per the commands from the business logic.

Architecture Diagram:

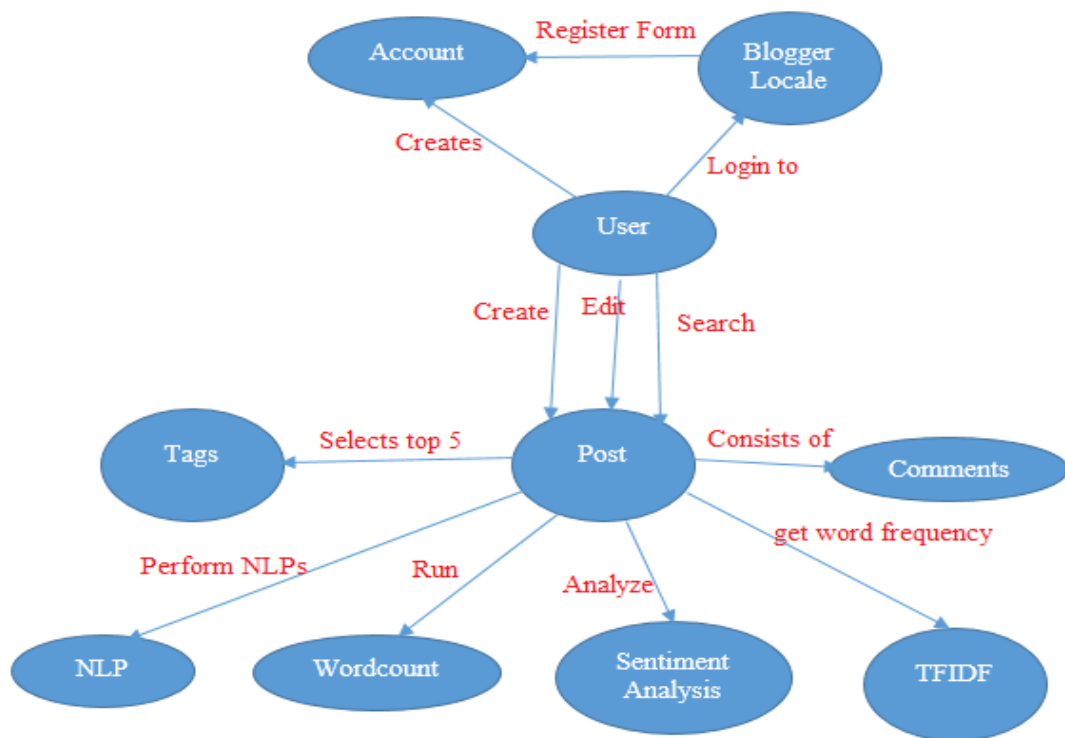


ER Diagram:

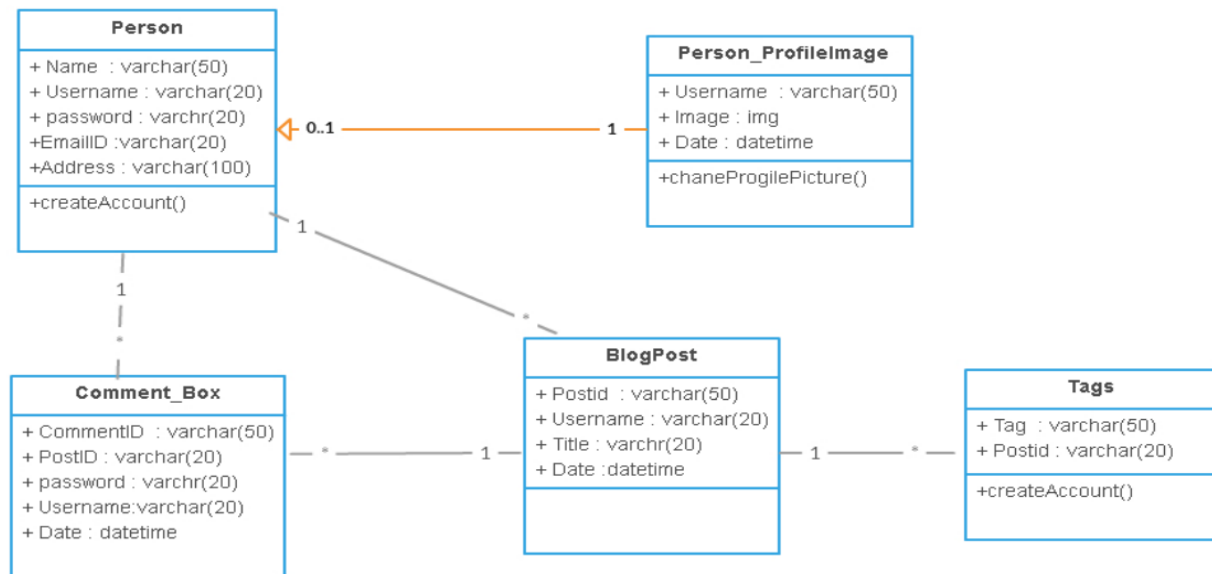
An entity-relationship diagram is a model representing the information system in the graphical form which shows the relationship between places, concepts, people, objects, or events within that system.



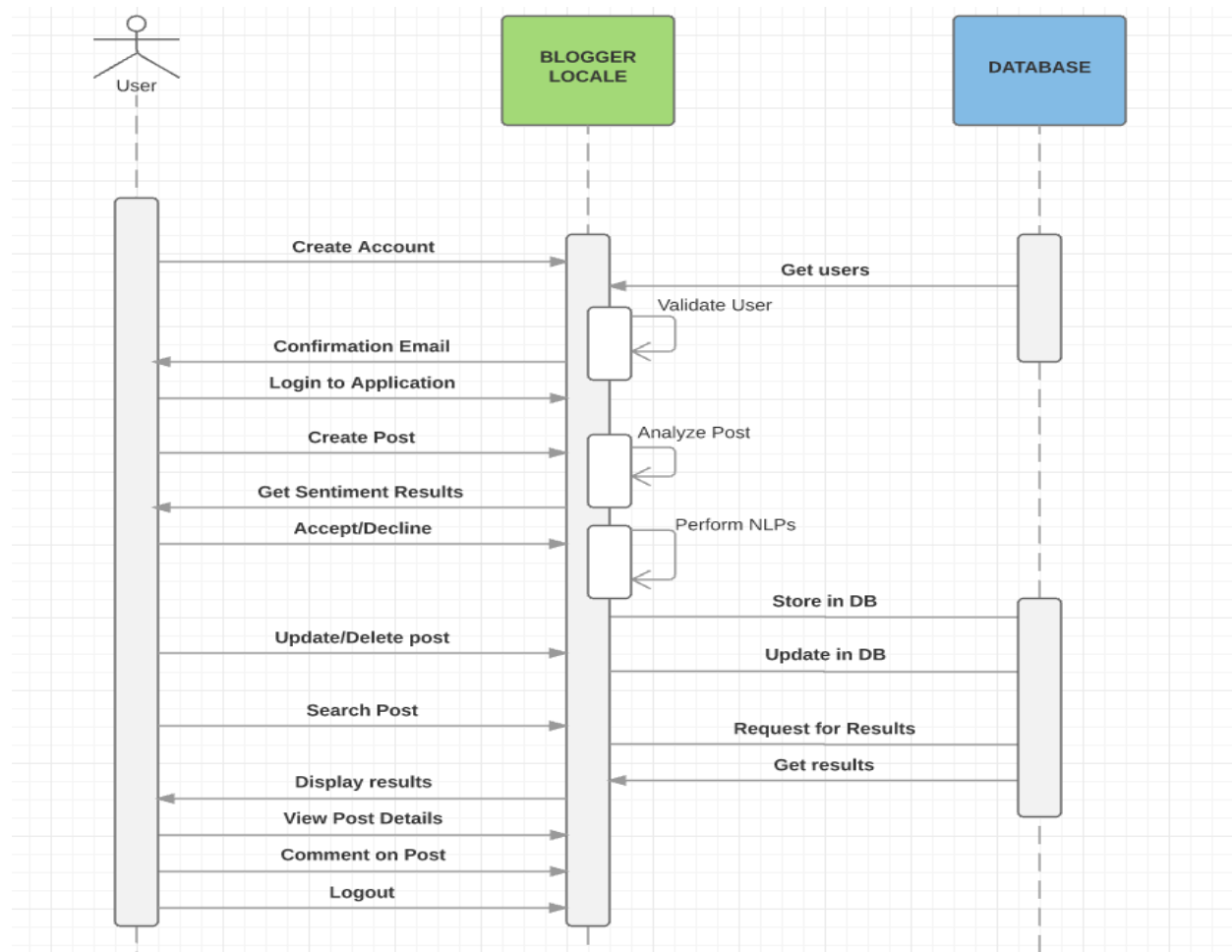
Knowledge Graph:



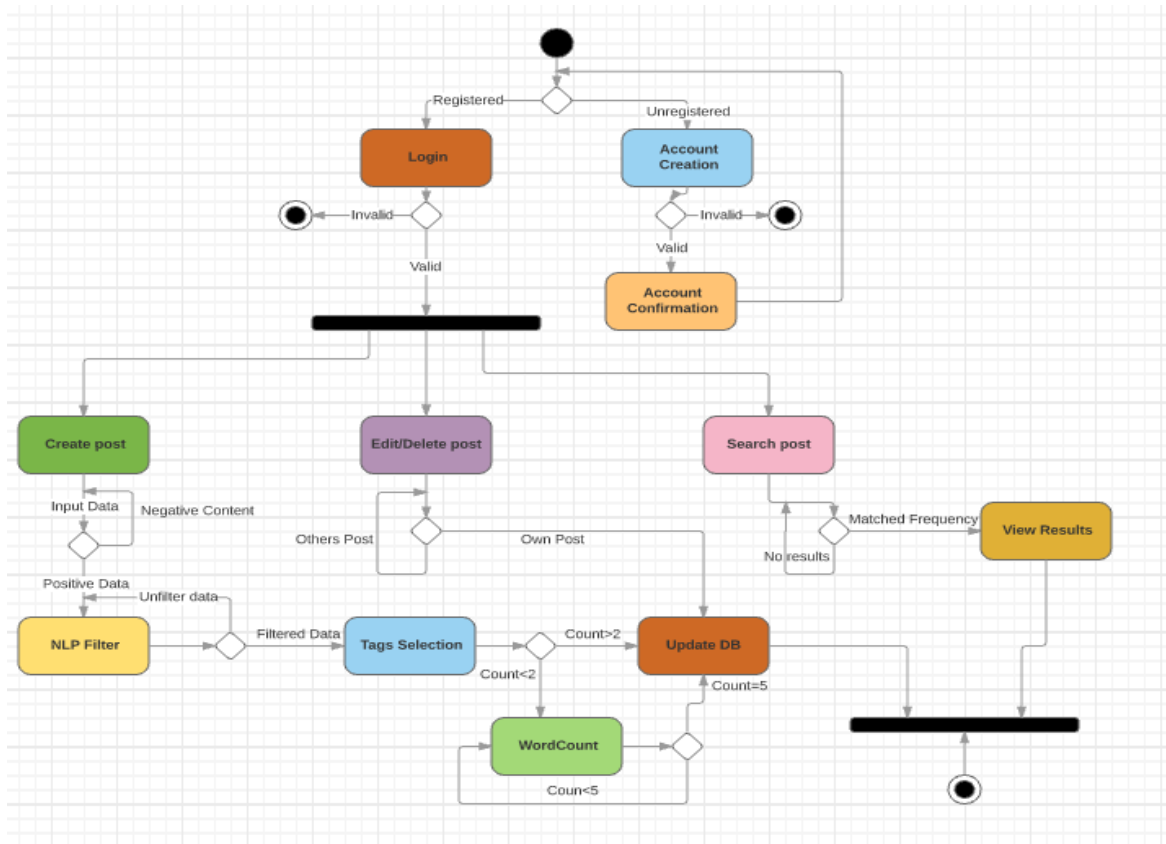
Class Diagram:



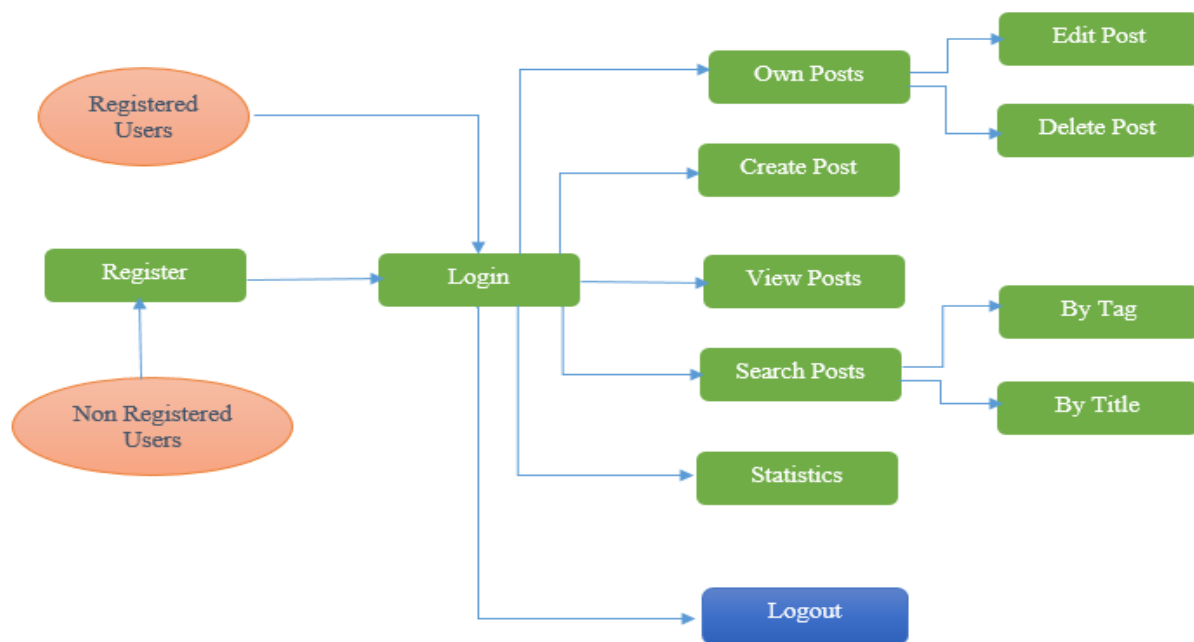
Sequence Diagram:



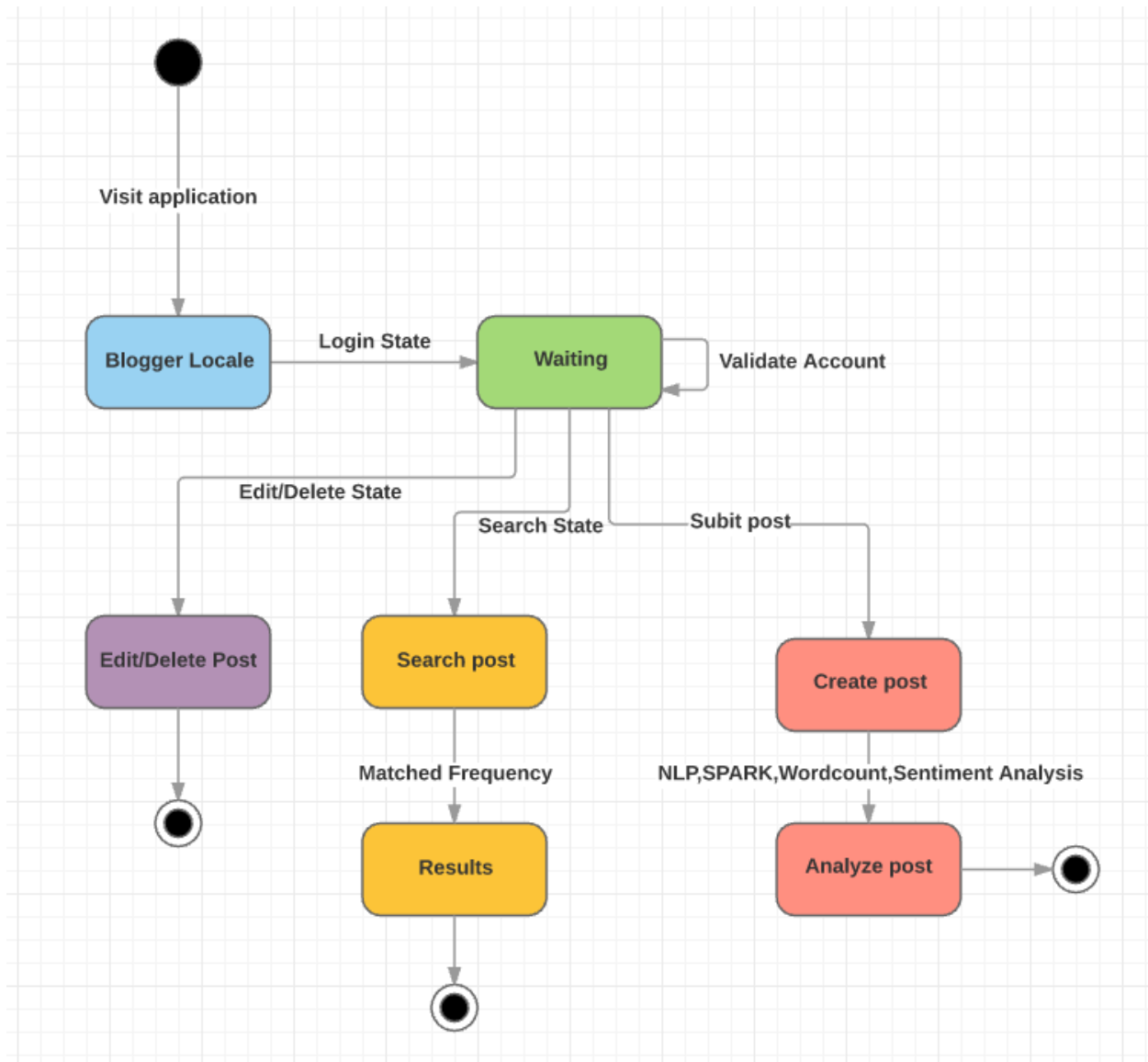
Activity Diagram:



Work flow Diagram:



State Diagram:



Technologies Being Used:

Front End : Bootstrap, HTML, CSS, JQuery, Java Script.

Business Logic : Java, Spark, JavaNLPs

Database : MSSQL 2008

Tools : Eclipse

Project Plan

Phase - I

1. Discussion of project Plan, requirements,
2. Requirements Review meeting
3. Designing class, UML, state and coming with an architecture diagram.
4. Design of web pages.
5. Form validations
6. Database integration
7. Functionalities
8. Analyzing a post by using sentimental analysis.

Phase -II

1. Inclusion of NLPs for Tag based search.
2. Inclusion of NLPs for showing the suggestions with machine learning from the data sets already available.

Phase - III

1. Hosting online.

Features of Our Project:

1. User account registration
2. Submission of post either by static or file upload or API
3. Usage of NLPs for Lemmatization and stop word removal.
4. Identification of tags using TF IDF NLP.
5. Suggestion of tags based on the existing data sets.
6. Intelligent search of posts from the existing data sets and searching online using Google API.
7. Edit or delete a post by using a filter of posts.
8. Statistics on post being posted daily.

Milestones:

The screenshot shows the GitHub repository page for `nandanamudi / KDM-Summer2016-BlogSearch`. The 'Milestones' tab is selected, showing three open milestones:

- Project Phase -I**: Due by June 24, 2016. 90% complete (2 open, 18 closed).
- Project Phase-II**: Due by July 8, 2016. 0% complete (0 open, 0 closed).
- Project Phase -III**: Due by July 22, 2016. 0% complete (0 open, 0 closed).

Each milestone has a progress bar and links to 'Edit', 'Close', and 'Delete'.

Closed Issues for Phase - I:

The screenshot shows the 'Issues' tab for the repository, filtered by 'Project Phase -1'. The issues are listed in descending order of age:

- Design of login page according to master page** (1) - #12 opened 15 hours ago by nandanamudi
- Design of Bootstrap master page** (2) - #11 opened 15 hours ago by nandanamudi
- Design - Workflow Diagram & Activity Diagram** (2) - #10 opened 15 hours ago by nandanamudi
- Design - Sequence Diagram & State Diagram** (2) - #9 opened 15 hours ago by nandanamudi
- Design - Class Diagram & Knowledge graph** (2) - #8 opened 15 hours ago by nandanamudi
- Design - Architecture Diagram & ER Diagram** (2) - #7 opened 15 hours ago by nandanamudi
- Requirement review meeting** (1) - #6 opened 15 hours ago by nandanamudi
- Requirement gathering** (2) - #5 opened 15 hours ago by nandanamudi
- Discussion on Project Plan** (help wanted) (1) - #4 opened 15 hours ago by nandanamudi

GitHub repository view for **nandanamudi / KDM-Summer2016-BlogSearch**. The interface shows 7 open issues and 13 closed issues. The search filter is set to "is:issue is:closed".

Open Issues:

- Form Validations: Registration page validations** (1) #16 opened 15 hours ago by nandanamudi. Project Phase -1.
- Form Validations: Login page validation** (2) #15 opened 15 hours ago by nandanamudi. Project Phase -1.
- Design a page to create post or upload post from your computer** (2) #14 opened 15 hours ago by nandanamudi. Project Phase -1.
- Design of Register Page** (1) #13 opened 15 hours ago by nandanamudi. Project Phase -1.
- Design of login page according to master page** (1) #12 opened 15 hours ago by nandanamudi. Project Phase -1.

A notification on the right states: "Screenshot saved. The screenshot was added to your OneDrive."

Open issues:

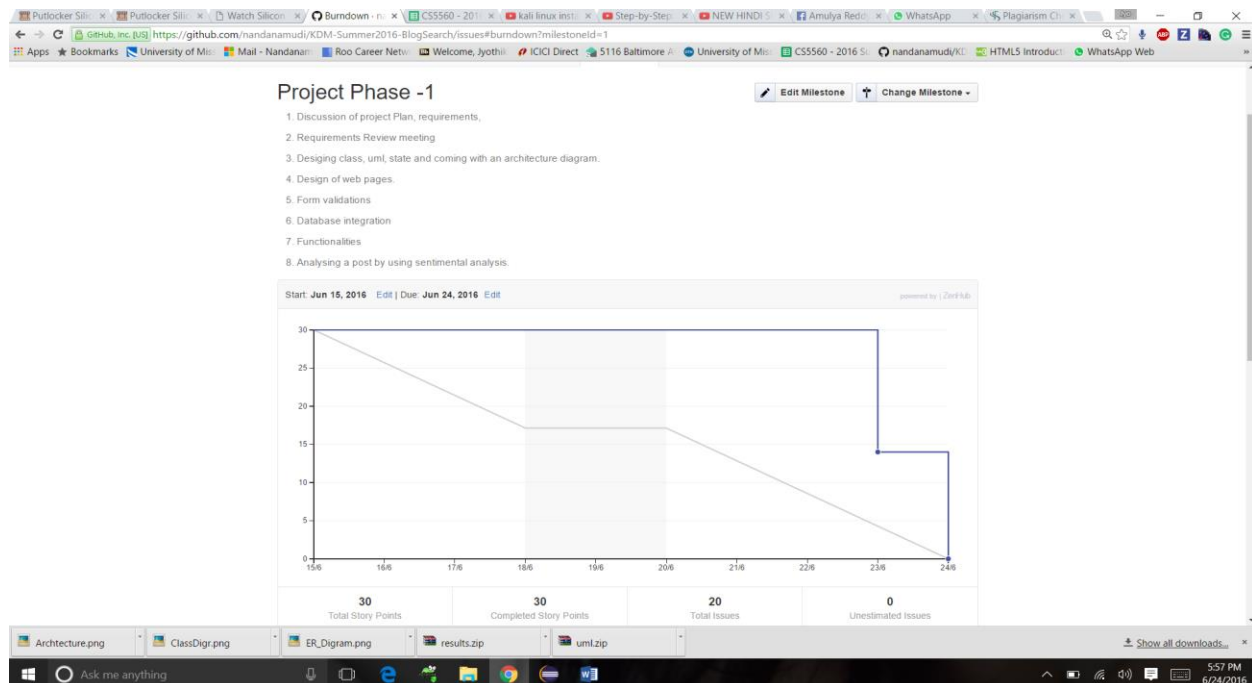
GitHub repository view for **nandanamudi / KDM-Summer2016-BlogSearch**. The interface shows 7 open issues and 13 closed issues. The search filter is set to "is:issue is:closed".

Open Issues:

- Project Phase Report -1 Submission** (2) #23 opened 14 hours ago by nandanamudi. Project Phase -1. New Issues.
- Sentimental analysis on the user post** (1) #22 opened 14 hours ago by nandanamudi. Project Phase -1. New Issues.
- Functionalities: Registration page** (1) #21 opened 15 hours ago by nandanamudi. Project Phase -1. New Issues.
- Functionalities: Login** (1) #20 opened 15 hours ago by nandanamudi. Project Phase -1. New Issues.
- Creation of tables for users with all the field required** (1) #19 opened 15 hours ago by nandanamudi. Project Phase -1. New Issues.
- Integration of database** (1) #18 opened 15 hours ago by nandanamudi. Project Phase -1. New Issues.
- Page Validation in post submission page** (2) #17 opened 15 hours ago by nandanamudi. Project Phase -1. New Issues.

A ProTip at the bottom states: "ProTip! Follow long discussions with comments:>50."

Project Phase – I Burndown Chart:



Project Management

We shared work equally in this project.

Responsibilities:

- | | |
|--|-----------------------|
| 1. Designing Architecture Diagram | - Involves Whole Team |
| 2. ER Diagram | - Ashok |
| 3. Class Diagram, Knowledge Graph | - Jyothi Kiran |
| 4. Sequence Diagram and State Diagram | - Saitejaswi |
| 5. Workflow Diagram and Activity Diagram | - Pratap |
| 6. Master Page Layout Design for the project | - Ashok |
| 7. Login Page and Backend code, validations | - Saitejaswi |
| 8. Registration and Backend Code, validations | - Pratap |
| 9. Page for post creation or upload, validations | - Jyothi Kiran |
| 10. Database Integration, creation of tables | - Ashok |
| 11. Sentimental Analysis on the post | - Ashok, Jyothi Kiran |

Time taken: 100 Hrs

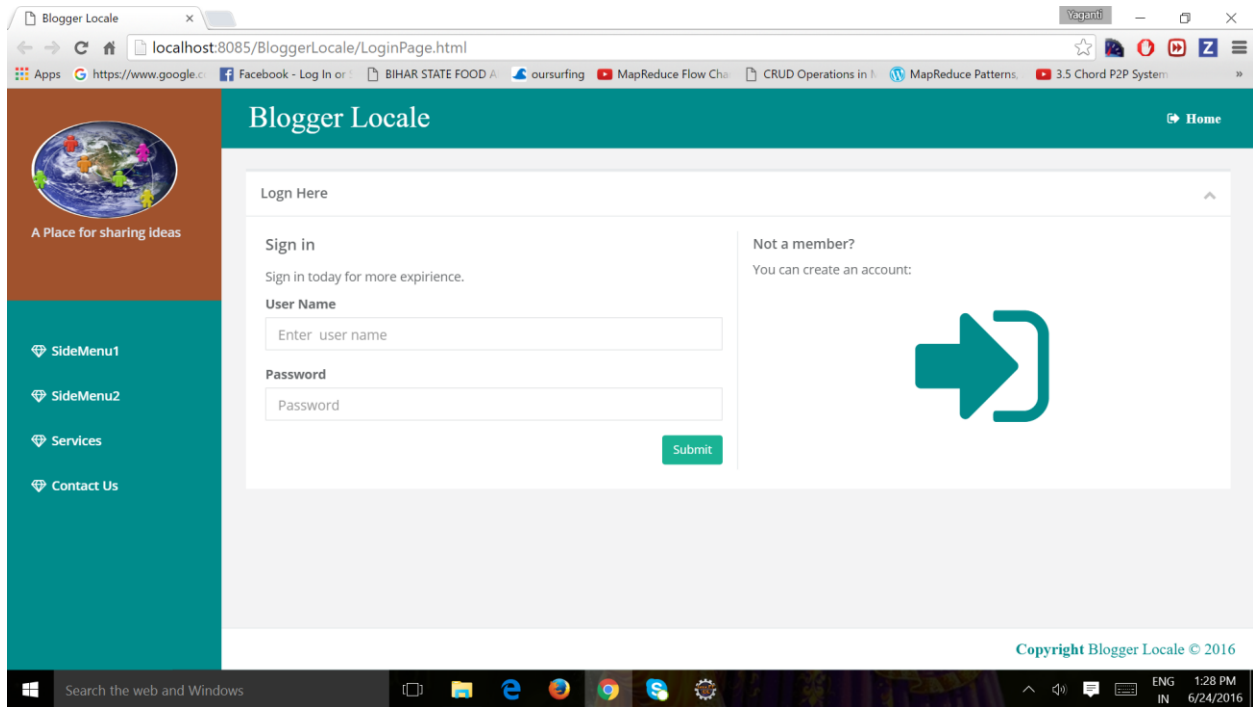
Contributions:

- | | |
|-----------------------------|-------|
| 1. Ashok Yaganti | - 25% |
| 2. Jyothi Kiran Nandanamudi | - 25% |
| 3. Sai Tejaswi Pullela | - 25% |
| 4. Pratap Rao Kadari | - 25% |

Results:

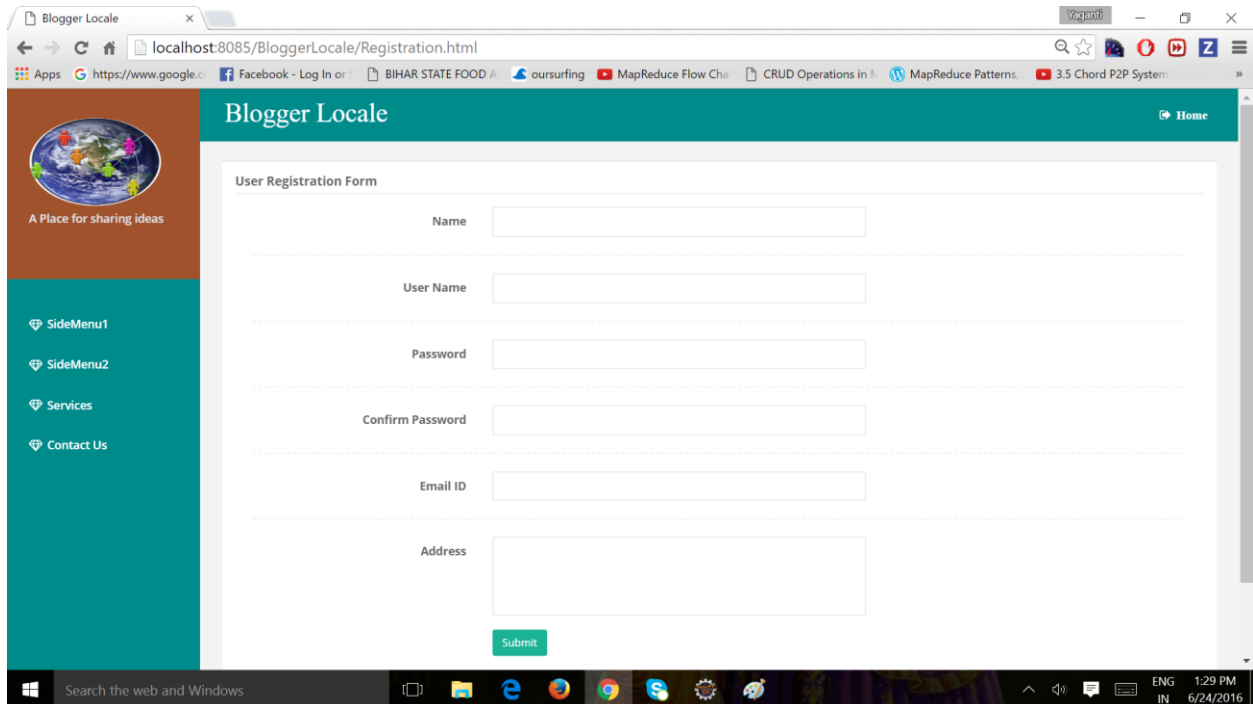
User Interface:

Login Page:



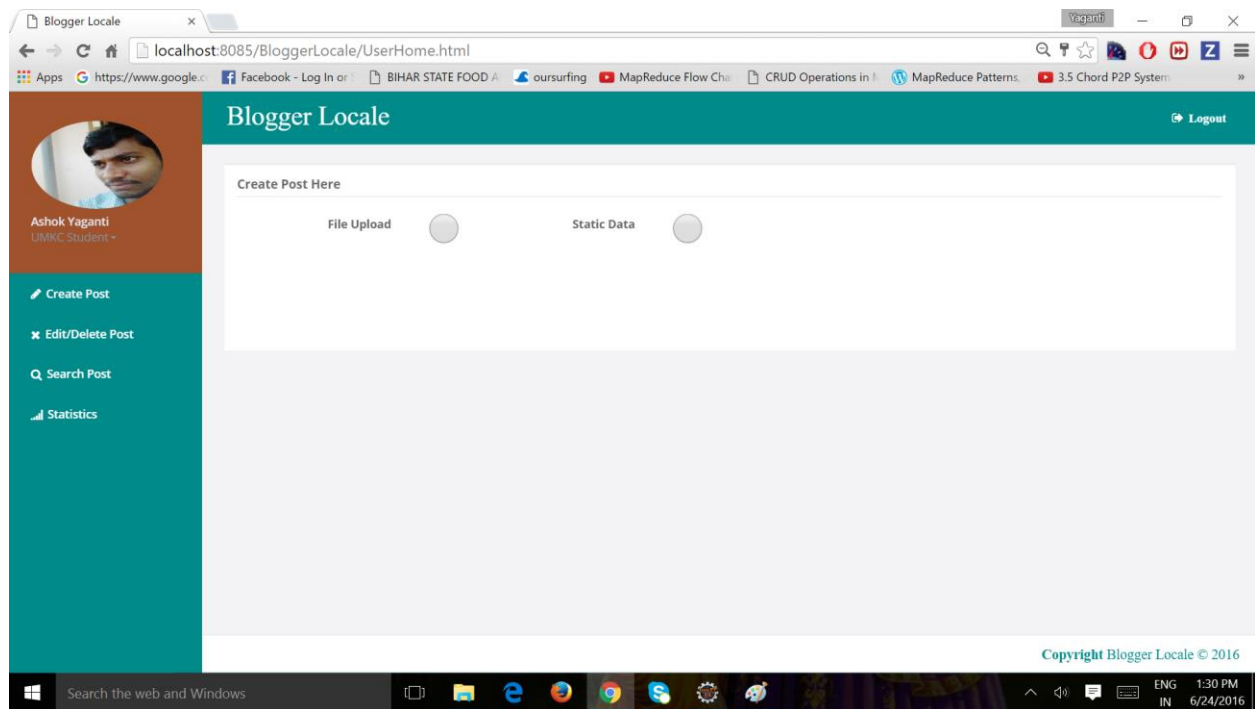
The screenshot shows a web browser window displaying the Blogger Locale login page. The browser's address bar shows the URL `localhost:8085/BloggerLocale/LoginPage.html`. The page has a teal header with the text "Blogger Locale" and a "Home" link. On the left, there is a sidebar with a globe icon and the text "A Place for sharing ideas", followed by a list of links: "SideMenu1", "SideMenu2", "Services", and "Contact Us". The main content area is titled "Logn Here" (note the typo) and contains a "Sign in" section with fields for "User Name" (placeholder: "Enter user name") and "Password" (placeholder: "Password"), and a "Submit" button. To the right of the login form is a "Not a member?" section with the text "You can create an account:" and a large teal arrow pointing right. The footer of the page says "Copyright Blogger Locale © 2016". The Windows taskbar at the bottom shows the search bar and several application icons.

Register Page:

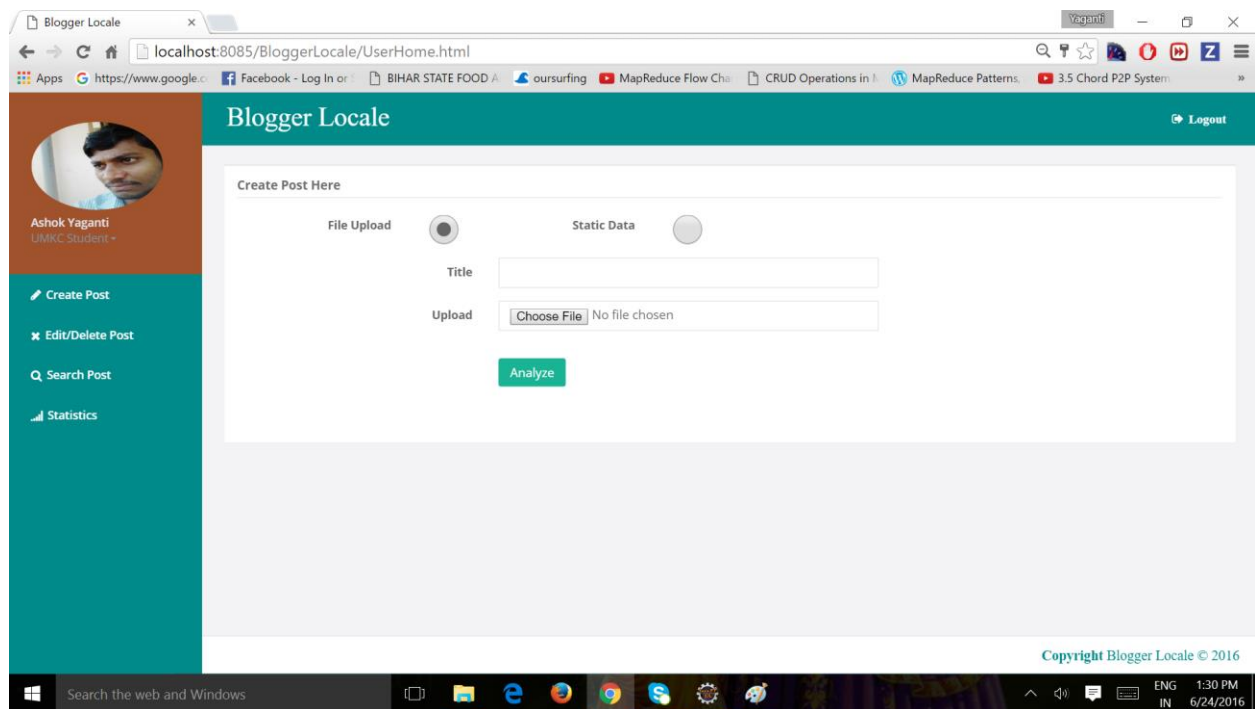


The screenshot shows a web browser window displaying the Blogger Locale registration page. The browser's address bar shows the URL `localhost:8085/BloggerLocale/Registration.html`. The page has a teal header with the text "Blogger Locale" and a "Home" link. On the left, there is a sidebar with a globe icon and the text "A Place for sharing ideas", followed by a list of links: "SideMenu1", "SideMenu2", "Services", and "Contact Us". The main content area is titled "User Registration Form" and contains several input fields: "Name", "User Name", "Password", "Confirm Password", "Email ID", and "Address". A "Submit" button is located at the bottom of the form. The footer of the page says "Copyright Blogger Locale © 2016". The Windows taskbar at the bottom shows the search bar and several application icons.

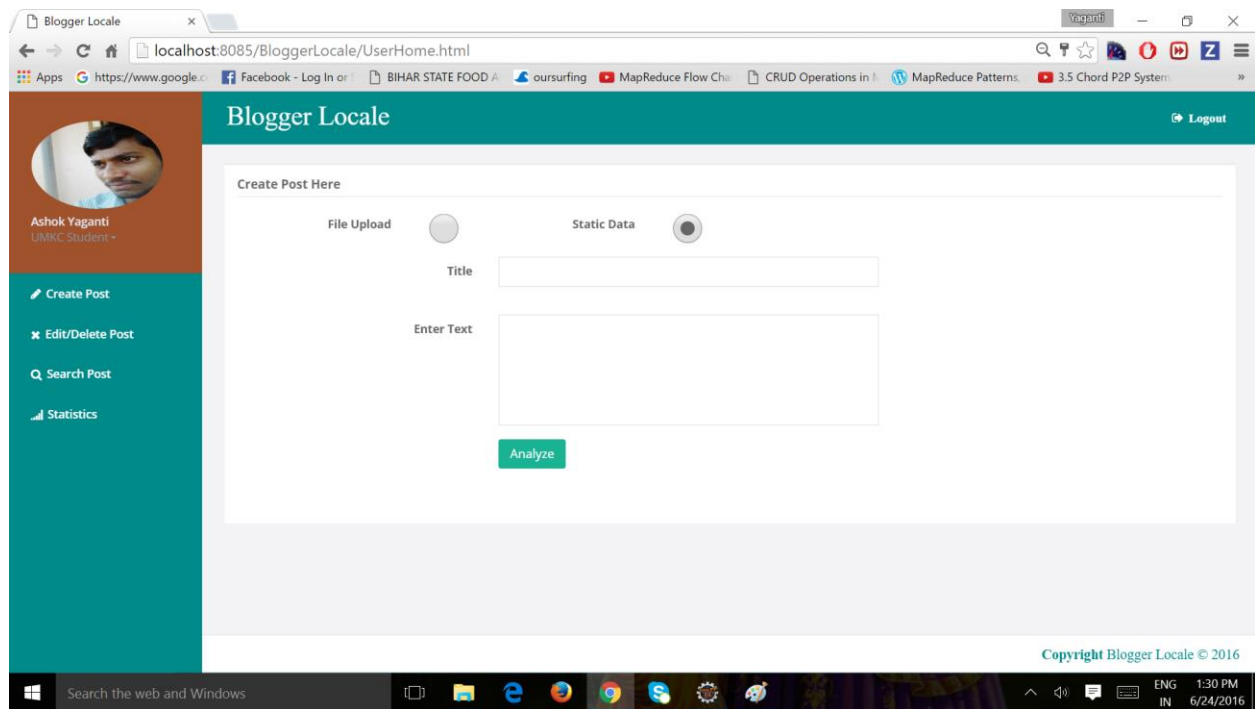
Post Submission Page:



File Upload Page:

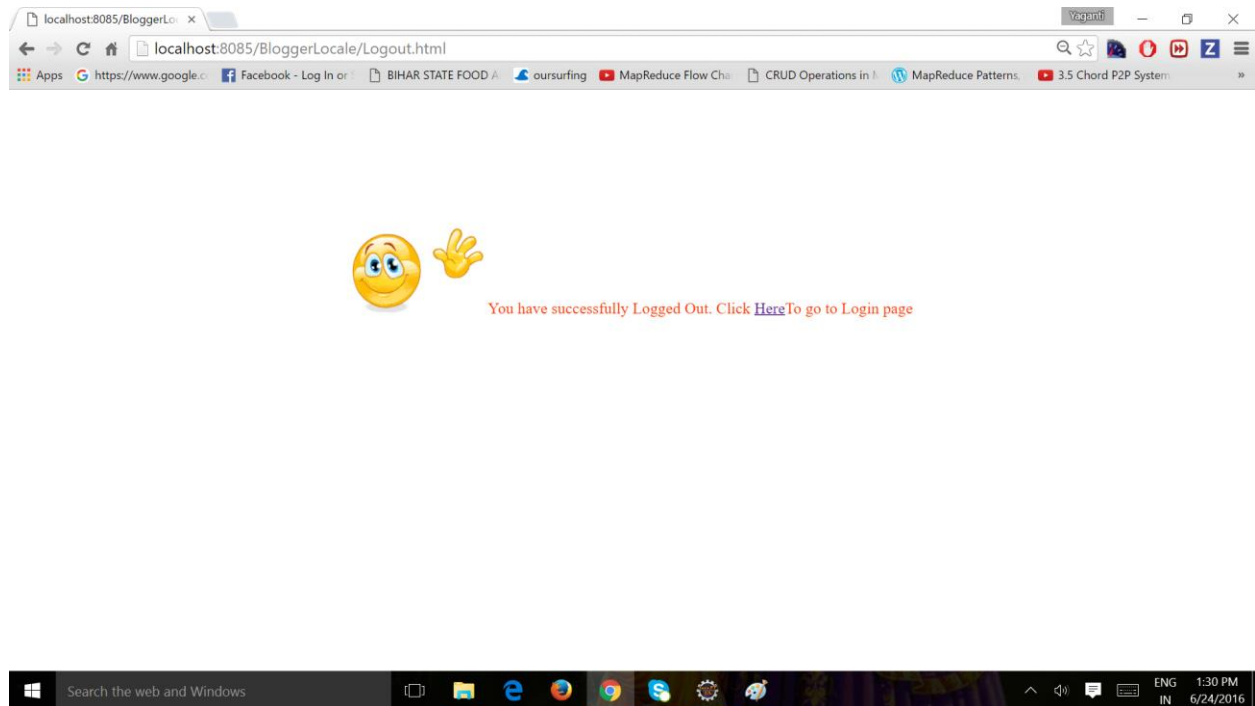


Static Post Submission Page:

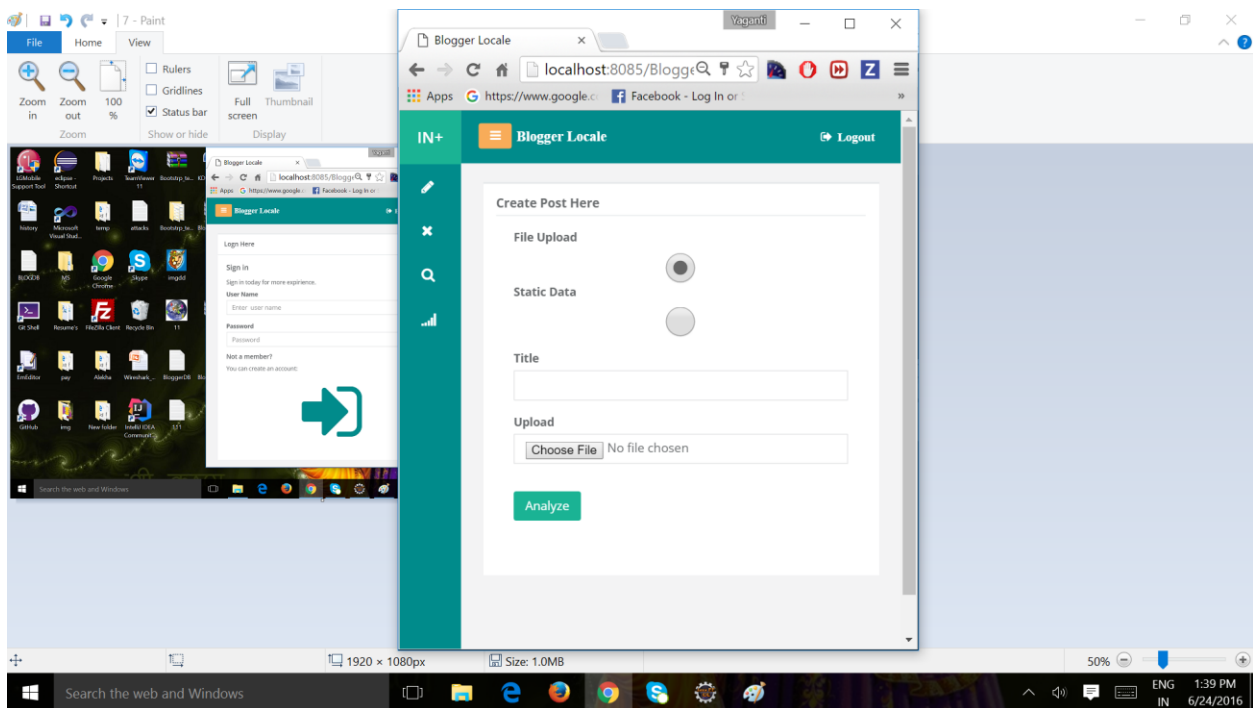
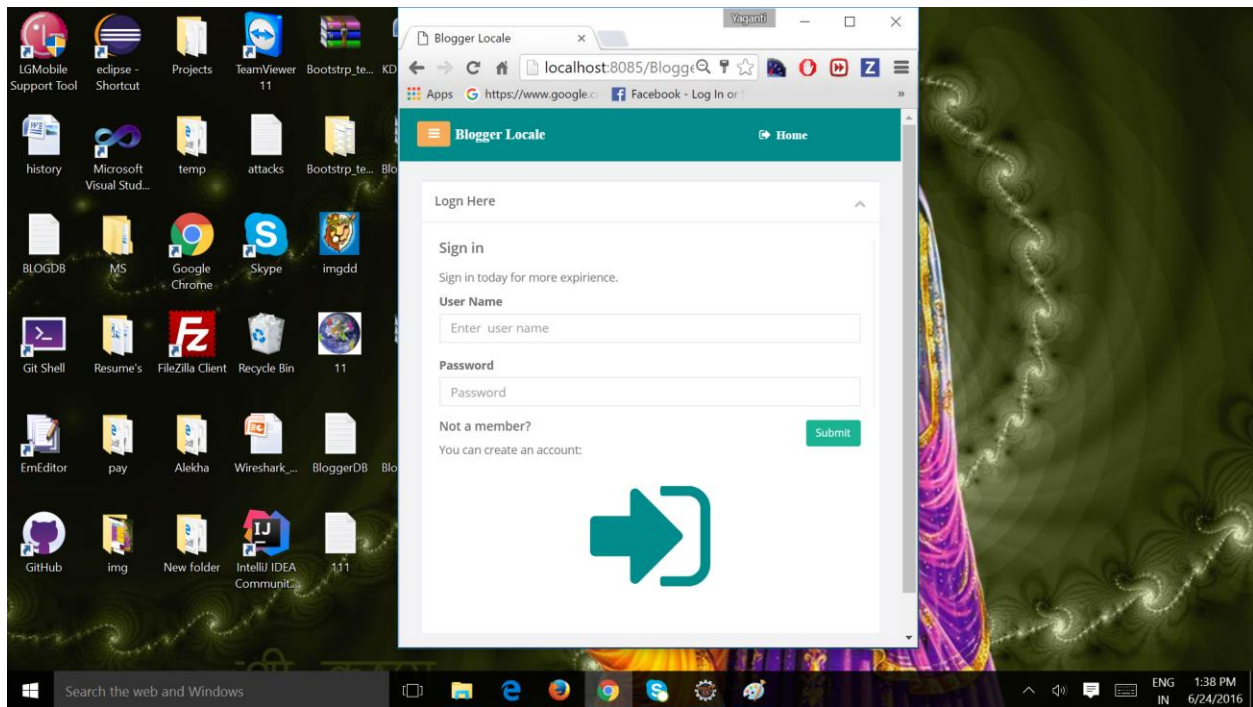


The screenshot shows a web browser window with the address bar displaying `localhost:8085/BloggerLocale/UserHome.html`. The page has a teal header with the title "Blogger Locale" and a "Logout" link. On the left, there is a sidebar with a profile picture of Ashok Yaganti, UMKC Student, and a menu with options: "Create Post", "Edit/Delete Post", "Search Post", and "Statistics". The main content area is titled "Create Post Here" and features two radio buttons: "File Upload" (unselected) and "Static Data" (selected). Below the radio buttons, there is a "Title" input field and a larger "Enter Text" text area. A green "Analyze" button is positioned below the text area. At the bottom right of the main content area, there is a copyright notice: "Copyright Blogger Locale © 2016". The Windows taskbar at the bottom shows the search bar and several application icons, with the system clock indicating 1:30 PM on 6/24/2016.

Logout page:

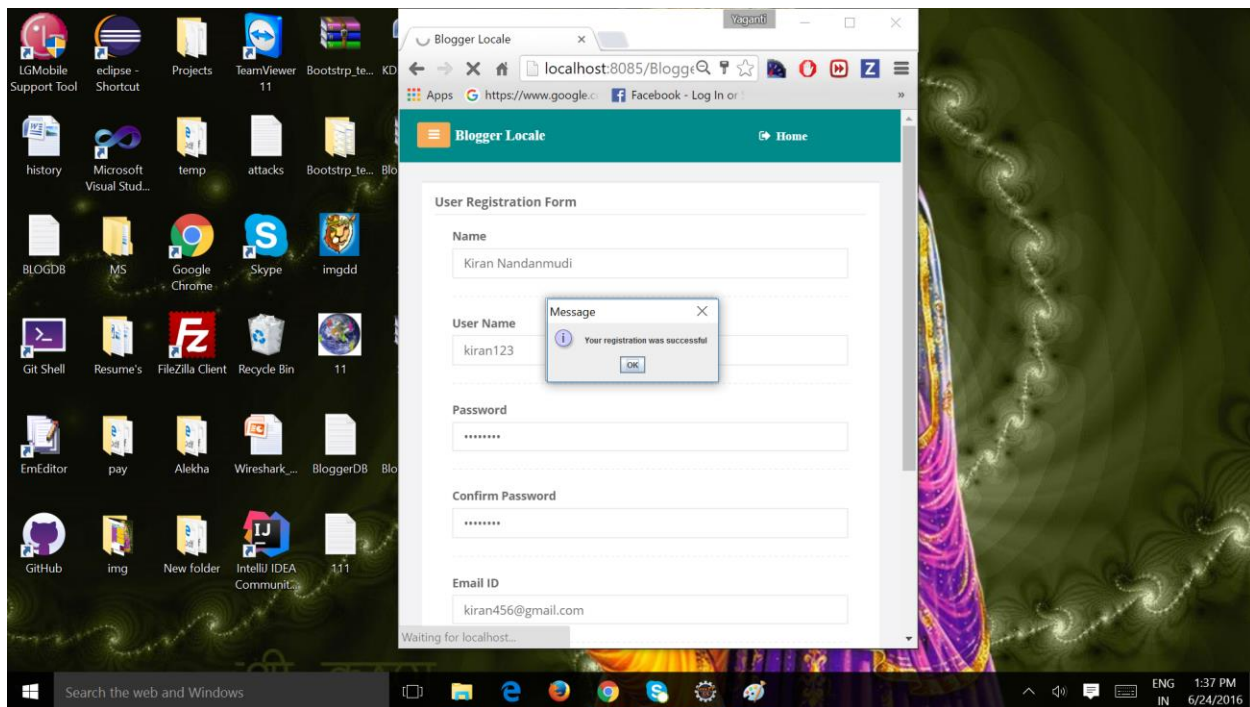


Mobile Compatible:

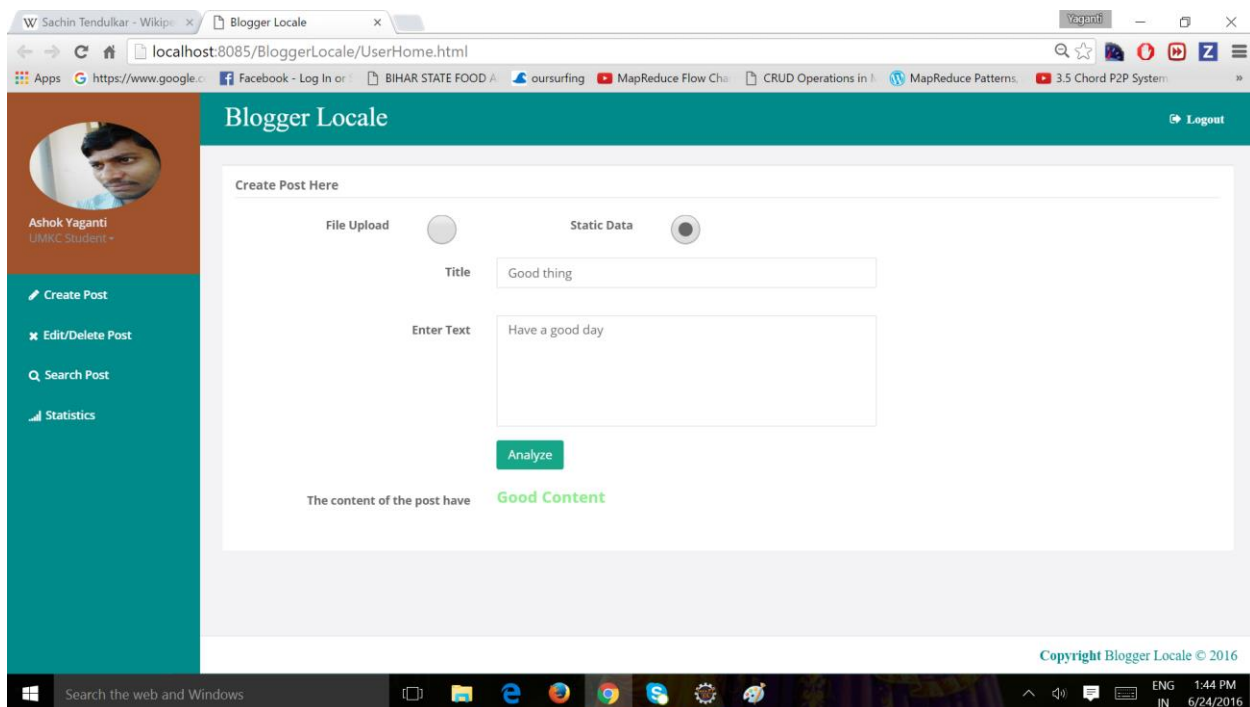


Implementation Results:

Registration of a User:

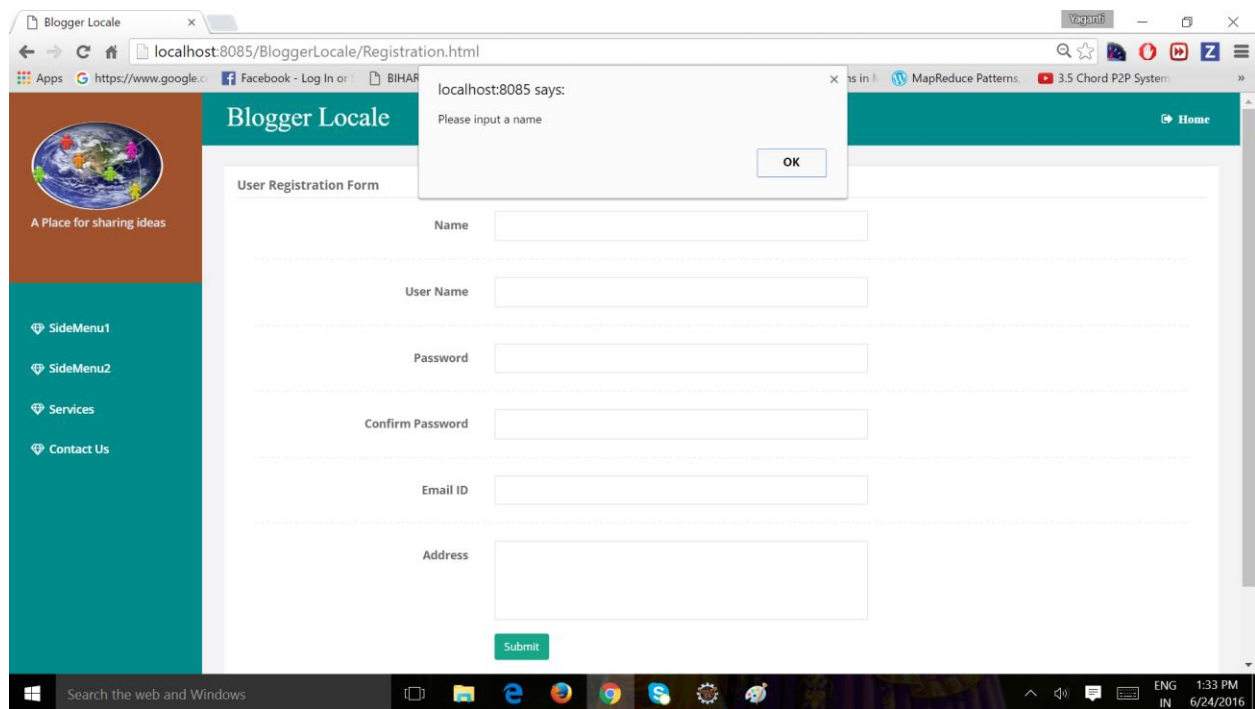


Sentimental Analysis on the post:

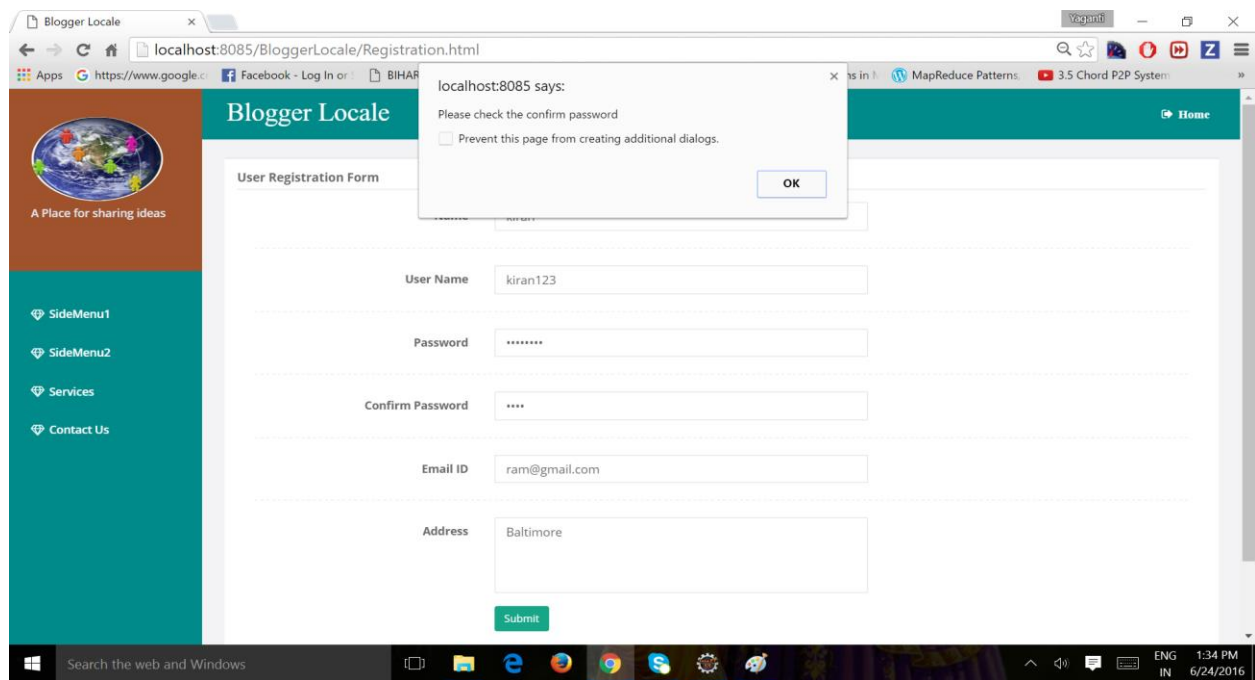


Test Results:

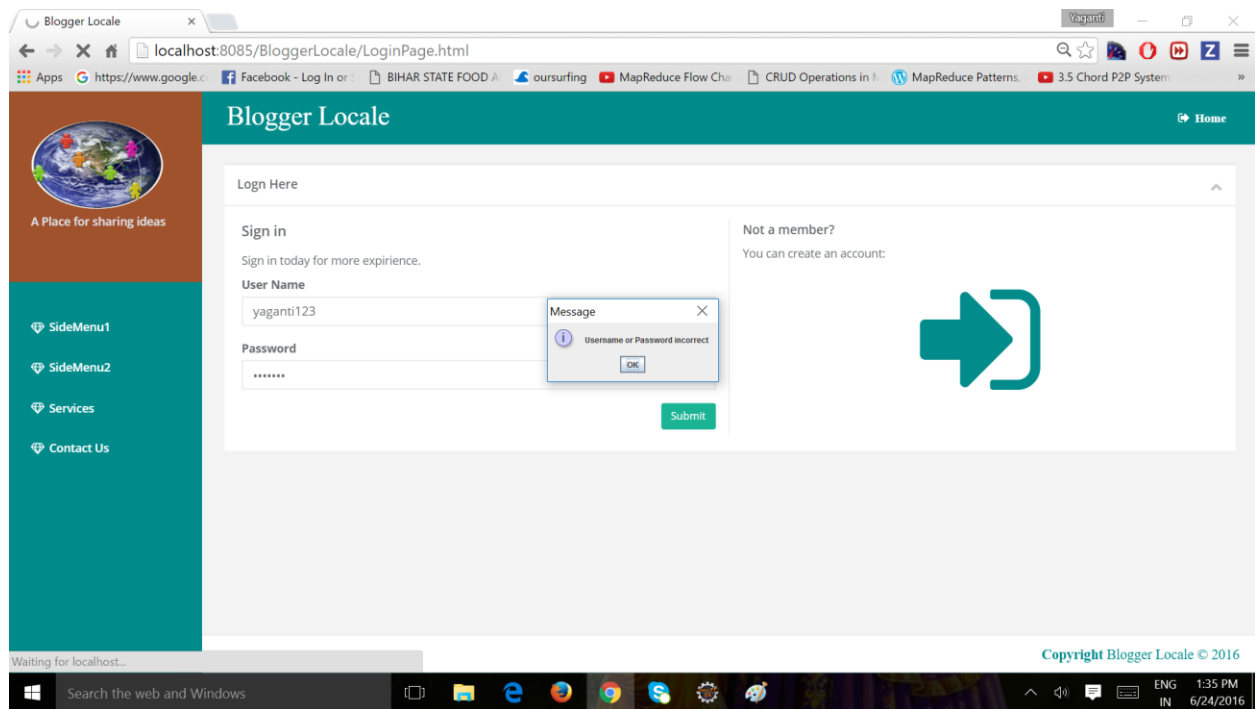
Input Field Validations:



Password Validation:



Login Verification:



Bibliography:

- <http://nlp.stanford.edu/software/lex-parser.shtml>
- <http://getbootstrap.com/css/>
- <http://spark.apache.org/examples.html>