Project Third Increment Report

I. Introduction

Usually elections happen in every country after a fixed time period or in case of emergency such as the elected leader has died or if he/she is assassinated. When the elections are nearby and during the elections the government spends a lot of money to conduct the elections. Lot of public money is spent to ensure that the elections happen fairly and the mode of conducting elections usually involves people going to nearby polling booth to cast their vote. For all of this to happen the government installs a lot of infrastructure and needs to give tight security to people and elections infrastructure so that no one can tamper with it, which in turn requires lot of money. This also requires many people to be deployed simultaneously at all polling booths for security so planning and coordination plays an important role here. Sometimes it becomes difficult or almost impossible for people living away from their hometown to travel back to their hometown and cast their vote, this may result in significant number of people not participating in Elections. Moreover most people don't know who are the people contesting in their constituency and even if they know they do not have complete information about them such as their educational qualifications, previous work experience, any criminal record etc. which is essentially required for people to asses every person who is contesting and finally elect the right person of their choice. And for people to come and vote at a polling booth a holiday needs to be declared which in turn requires all the organizations to shut down their services on the day of Elections, all this process ensures that a leader is elected but it involves the time and effort of a lot of people and organizations. As we know that every moment in our life is unpredictable and if due to some reason on the day of elections something goes wrong the whole process needs to be repeated which again requires a lot of time, money and effort. Also the entire process requires a lot of planning and coordination between many departments within the government at center and state. In spite of planning well sometimes we may fail in coordination and getting the work done as planned. In today's dynamic world where technology is driving us there is a need for using technology to replace such a process of conducting elections with a new process which can overcome the problems discussed above.

II. Objectives

The goal of our project is to develop an online voting system where people can cast their vote online to elect their leader. By conducting elections online we do not have to install any physical infrastructure such as polling booths and we do not have to deploy any security personnel to monitor the situation at every polling booth, this saves a lot of public money and it also avoids any security to be deployed which in turn saves time and effort of lot of people which in turn can be used for other productive purposes. As everything is online where people just need to vote through their smart devices people don't have to visit a polling booth and people who are staying away from their hometown due to different reasons can also participate in the Elections from where ever they are, in this way our application gives opportunity for everyone to participate in the Elections and makes their vote count and create a difference in electing the right person. Our idea involves money to be spent only on developing a scalable, secure and robust application which would be very less when compared to money being spent on conducting Elections in traditional way. Our application consolidates and provides complete information about every person who is contesting which in turn helps people to asses and elect the right person of their choice and it also ensures that there is no rigging and only the genuine registered voters are casting

their vote. Unlike traditional way of conducting Elections where we need many teams from different departments to coordinate we only require one team during Elections which monitors and ensures that the system which is running our online application is up and running. All this process does not require much coordination and man power. So essentially the voting system that is developed through our project saves time, money, effort and infrastructure that could be used for other productive purposes and also eases the entire process of conducting elections.

III. Features

We have developed the following features for your project:

1. Developed all the user interfaces required for the project.
2. Written validations code for all the data that is being passed to the database.
3. Created the database tables required for the project.
4. Inserted the registration data in to database tables.
5. Implemented the login functionality.
6. Implemented the password recovery functionality.
7. Read data from database and displayed.

IV. Existing Services/API

Did not use any APIs or existing services for Increment3

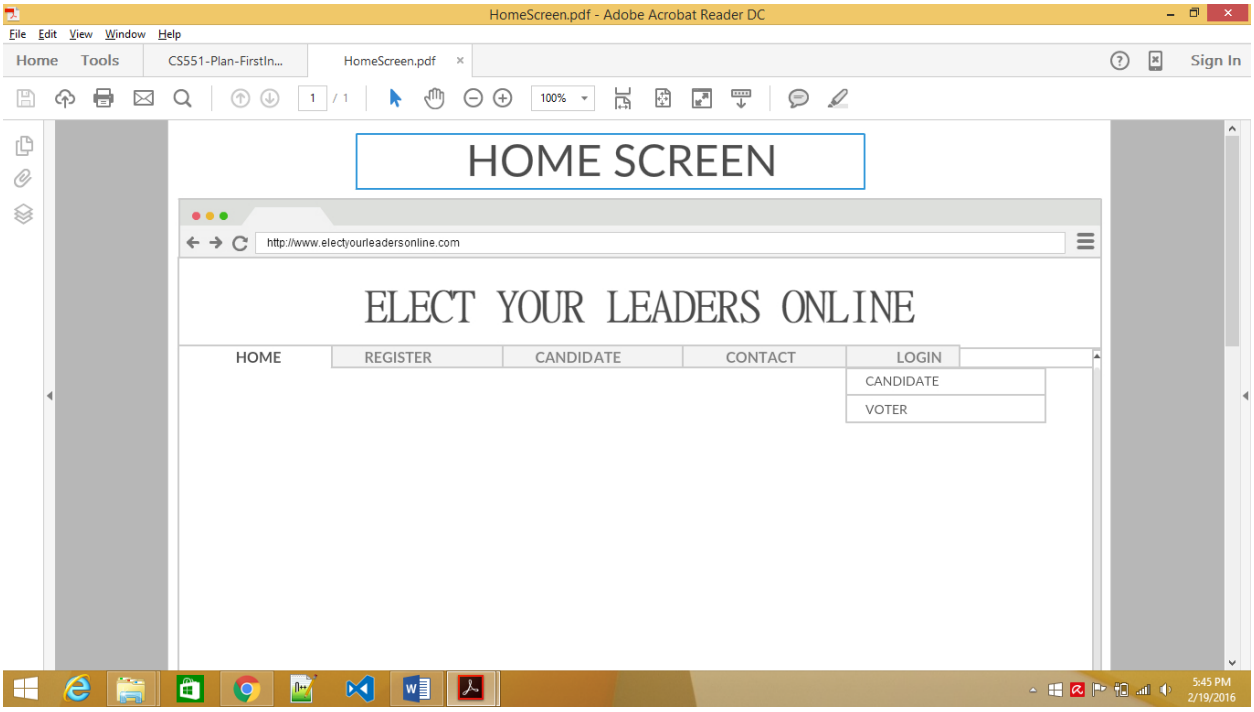
V. Detail Design of Features (using tools)

All the wireframes, class diagrams, sequence diagrams developed in Increment3 are at below link

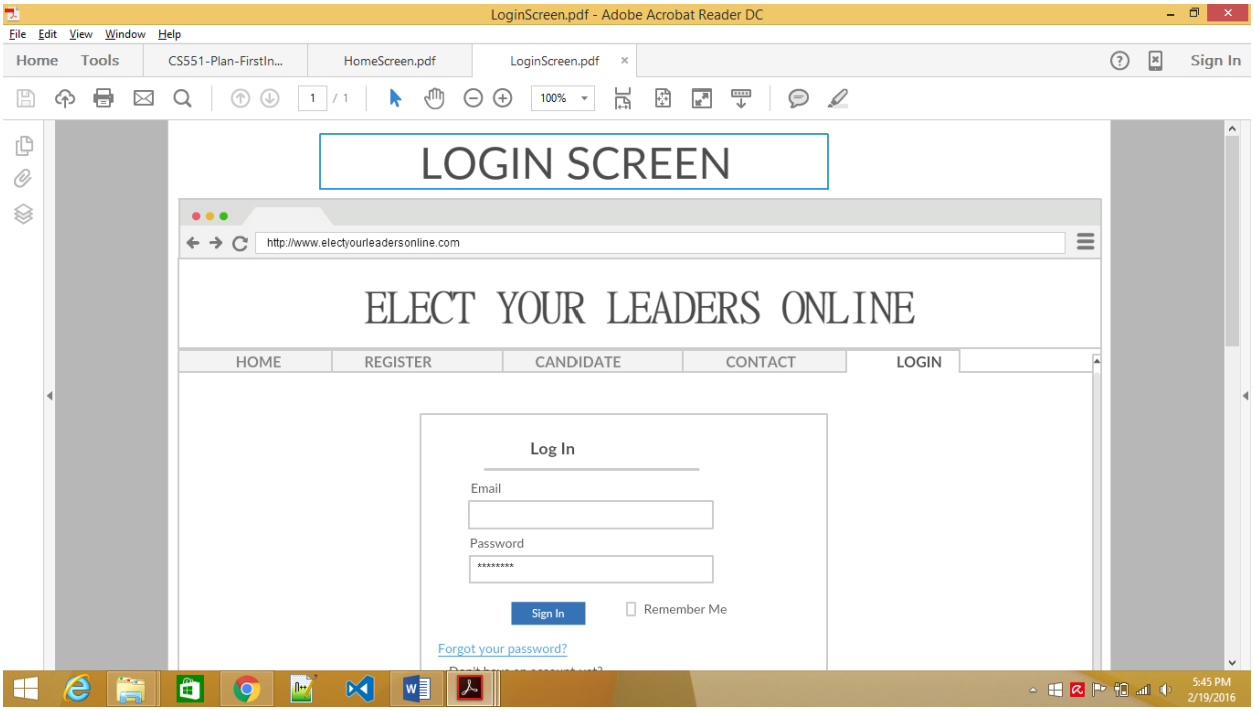
https://github.com/gkswargam/ASE_Project_Team9/tree/master/Increment3/Documentation/Project_Wireframes

Below are the wireframe screenshots for user interfaces that we have developed:

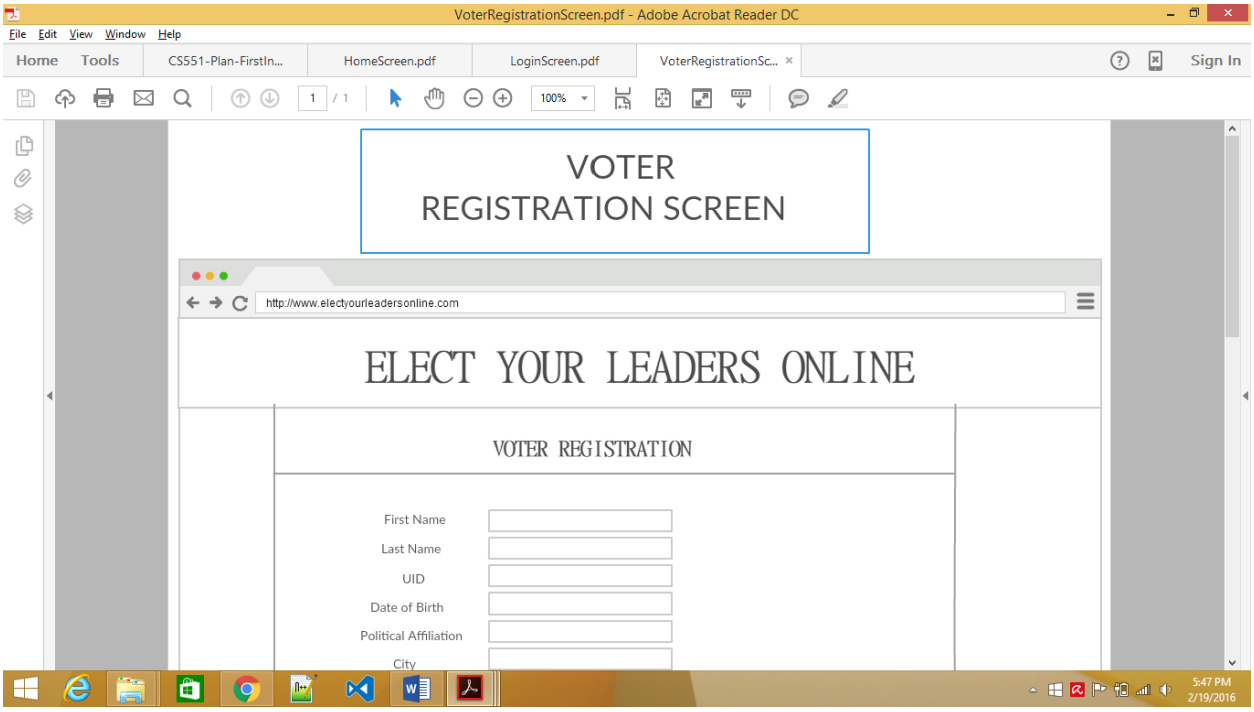
Home Screen



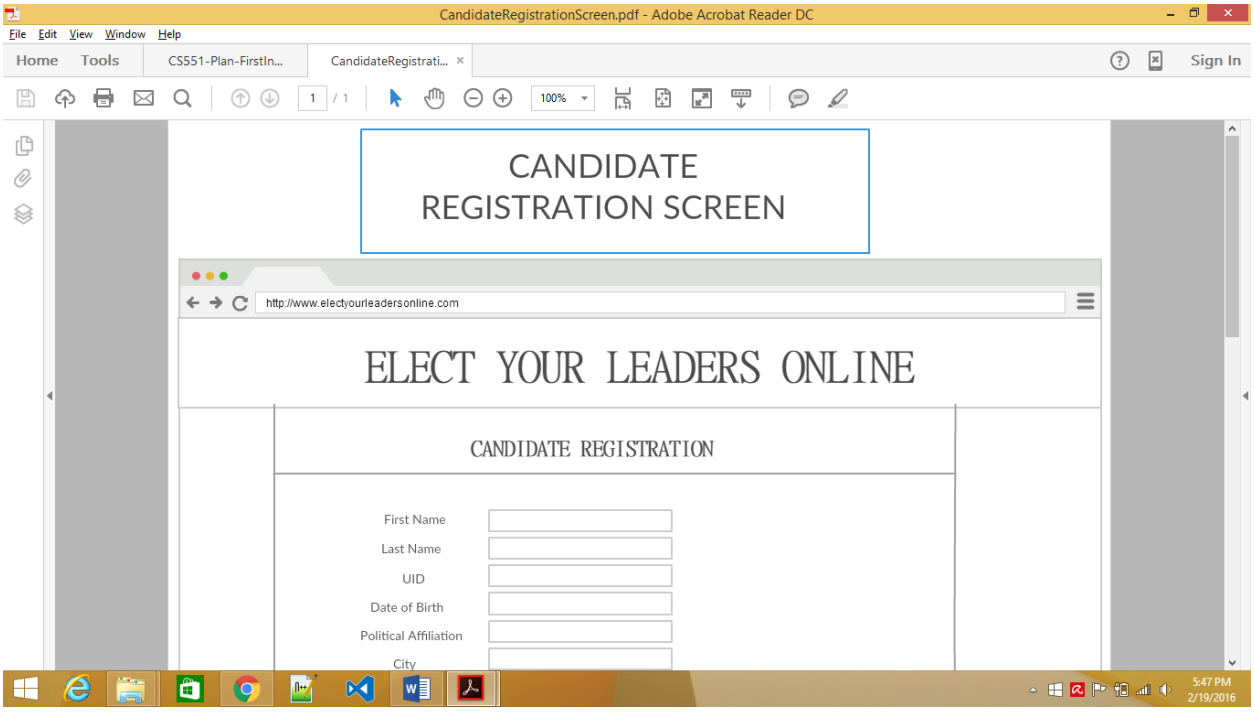
Login Screen



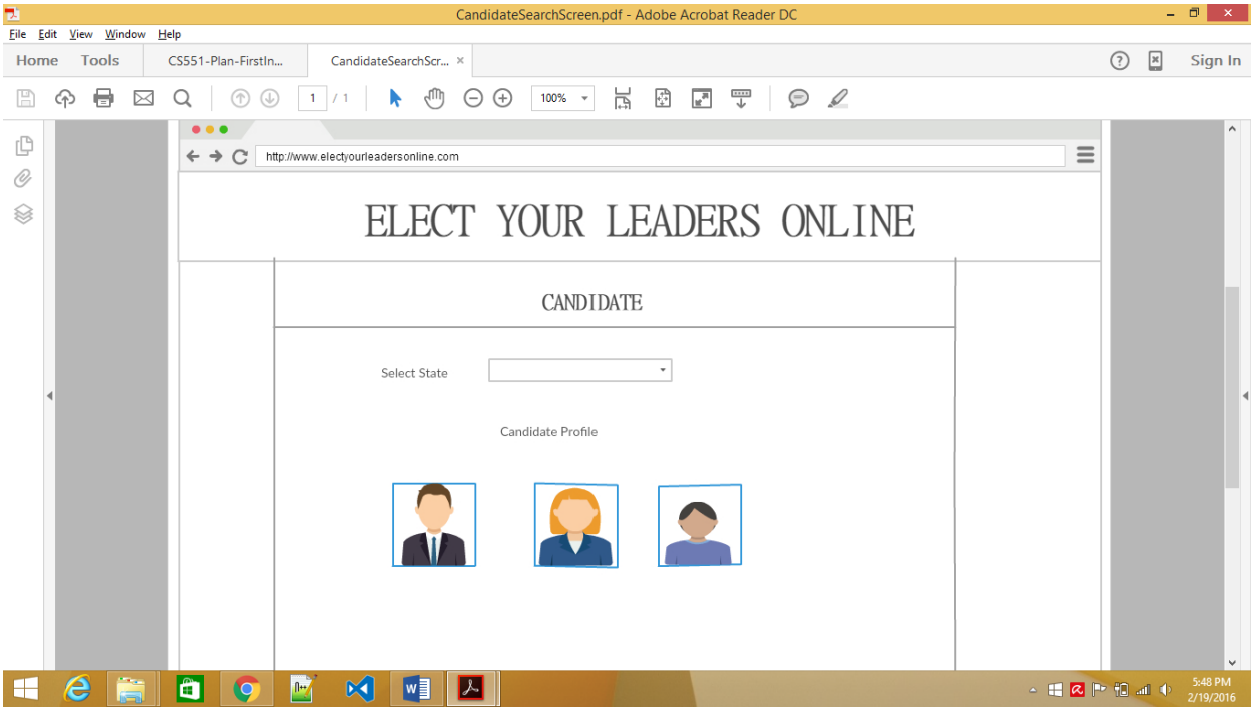
Voter Registration Screen



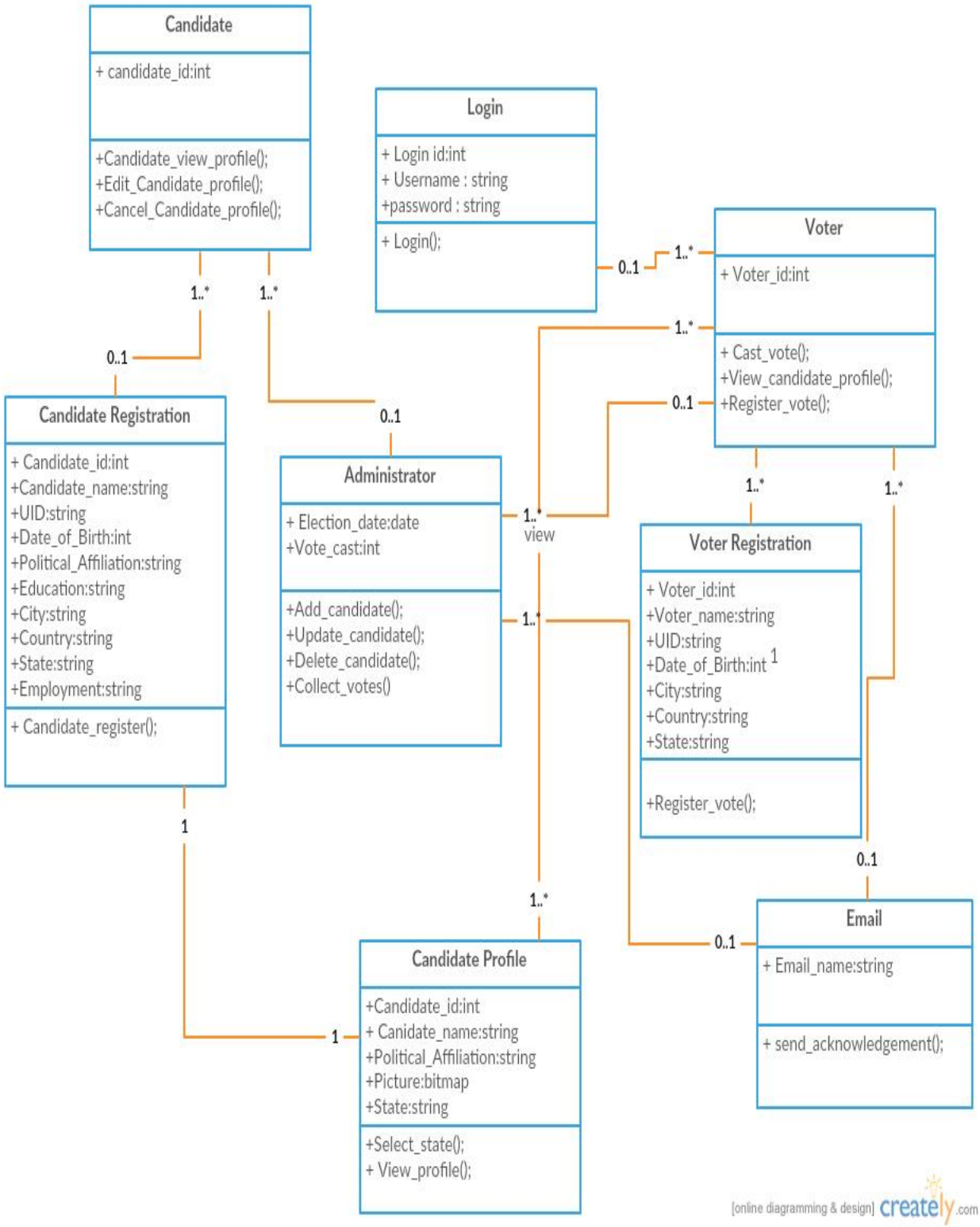
Candidate Registration Screen

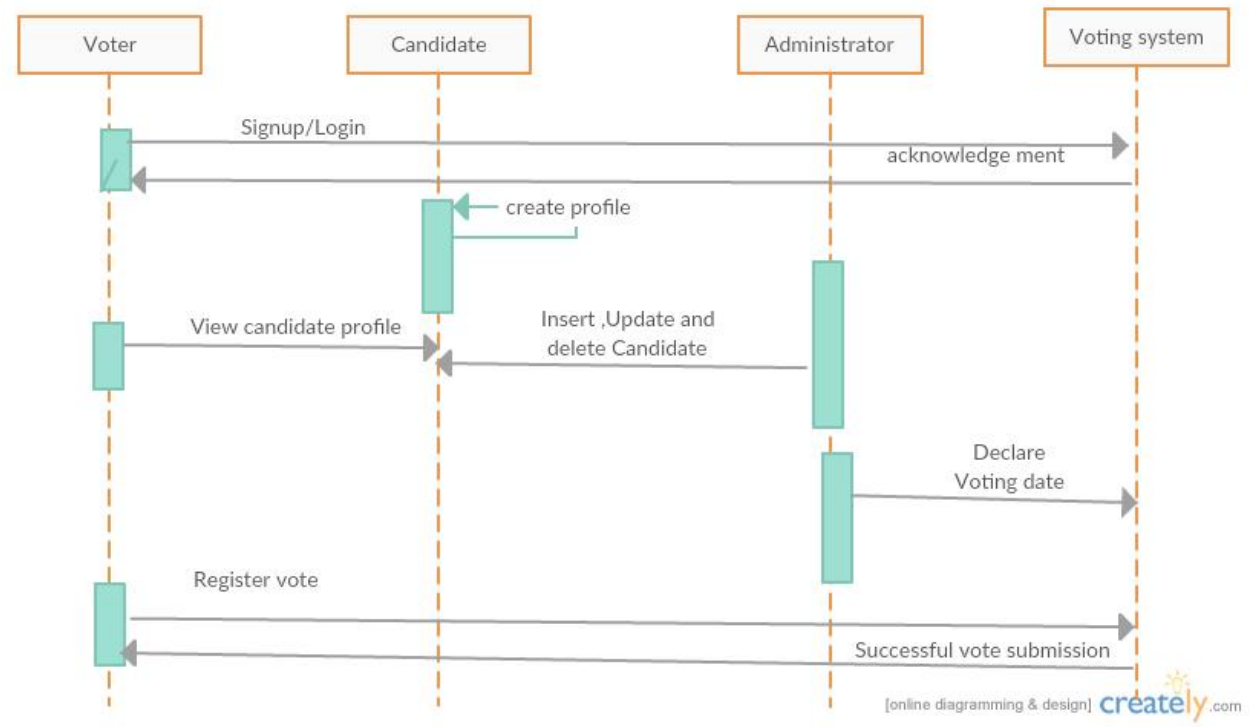


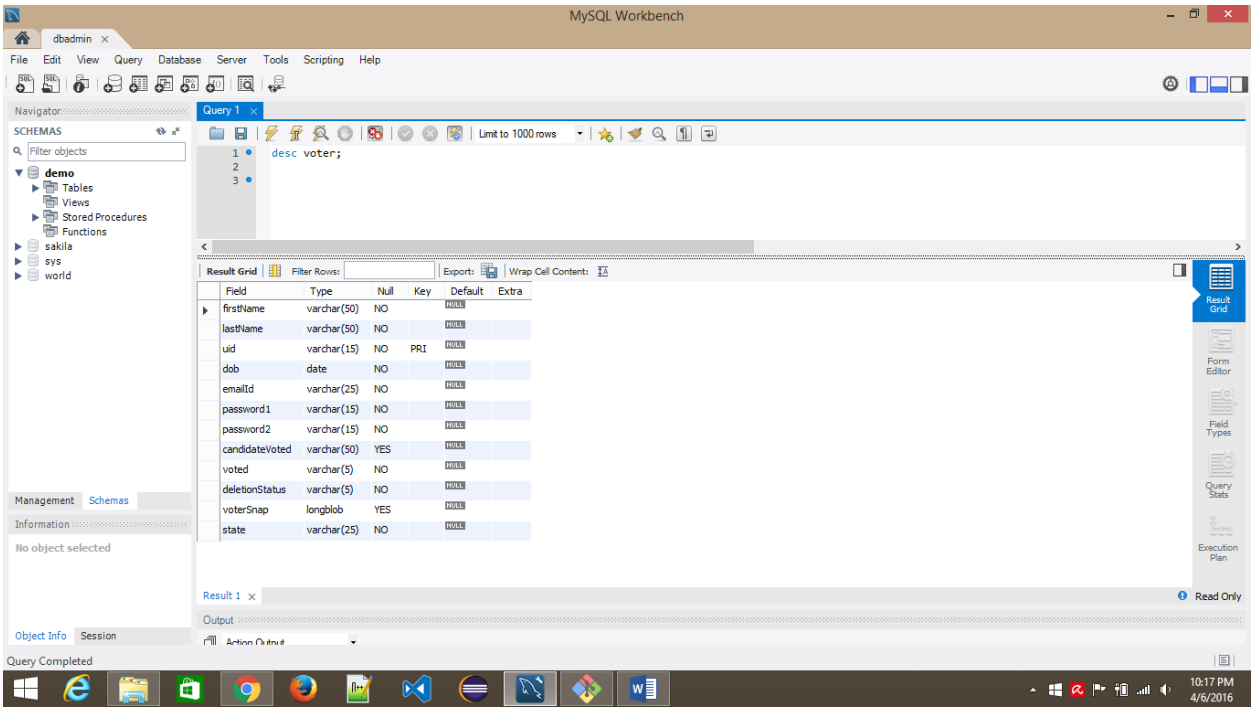
Candidate Search Screen

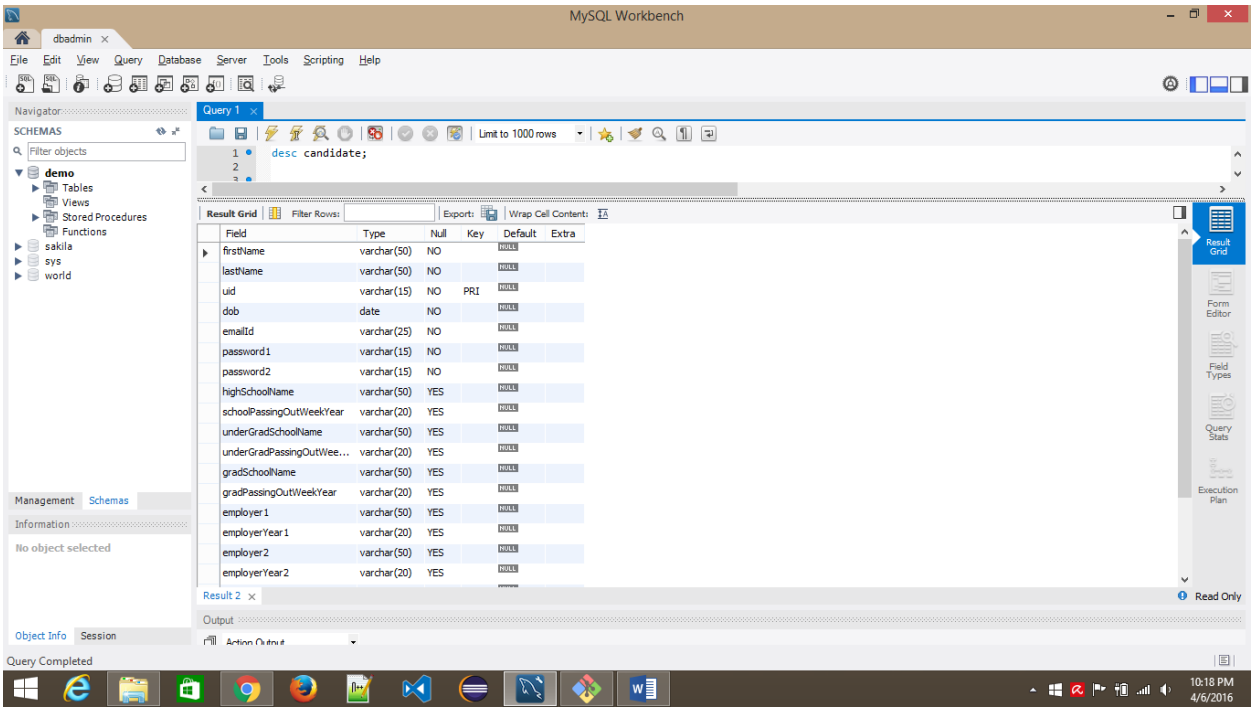


Below are class diagrams, sequence diagrams and database descriptions:




Voter
Candidate
Administrator
Voting system
Signup/Login
acknowledge ment
create profile
View candidate profile
Insert ,Update and
delete Candidate
Declare
Voting date
Register vote
Successful vote submission
[online diagramming & design] creately.com


MySQL Workbench
dbadmin
File Edit View Query Database Server Tools Scripting Help
Navigator
SCHEMAS
Filter objects
demo
Tables
Views
Stored Procedures
Functions
sakila
sys
world
Query 1
Limit to 1000 rows
1 desc voter;
2
3
Result Grid
Filter Rows:
Export:
Wrap Cell Content:
Field Type Null Key Default Extra
firstName varchar(50) NO NULL
lastName varchar(50) NO NULL
uid varchar(15) NO PRI NULL
dob date NO NULL
emailId varchar(25) NO NULL
password1 varchar(15) NO NULL
password2 varchar(15) NO NULL
candidateVoted varchar(50) YES NULL
voted varchar(5) NO NULL
deletionStatus varchar(5) NO NULL
voterSnap longblob YES NULL
state varchar(25) NO NULL
Result 1
Read Only
Output
Action Output
Management
Schemas
Information
No object selected
Object Info
Session
Query Completed
10:17 PM
4/6/2016



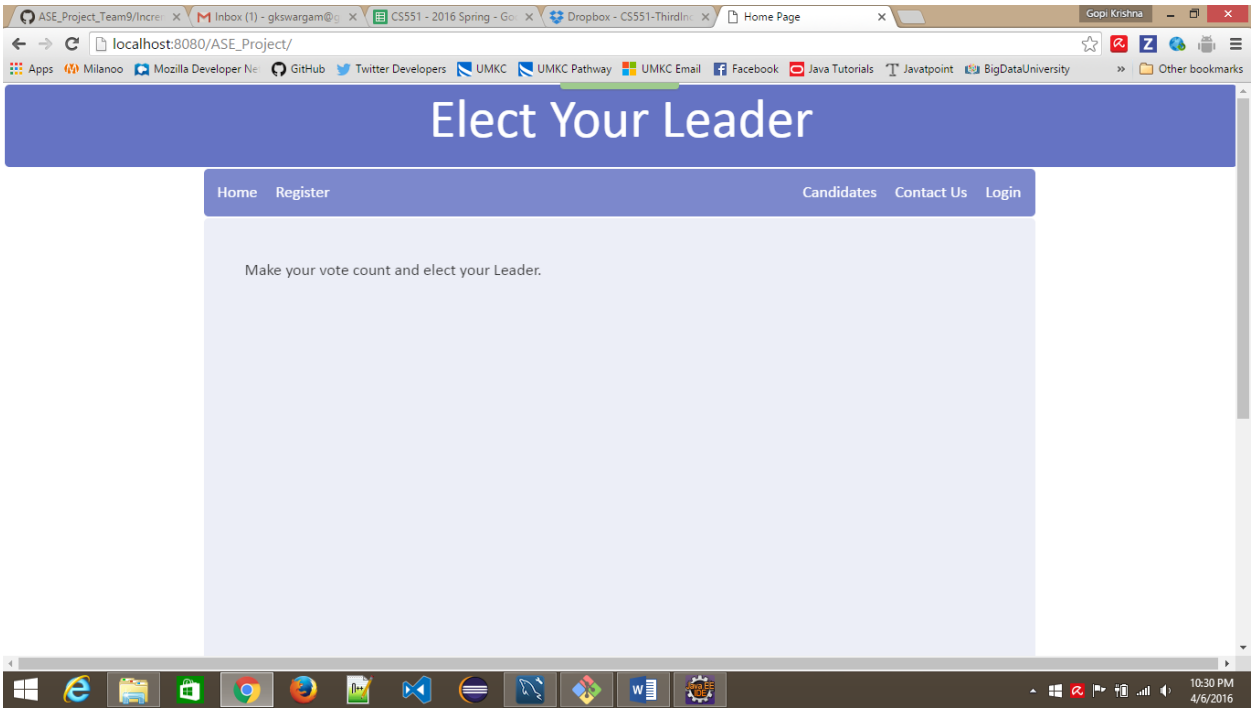
VI. Testing

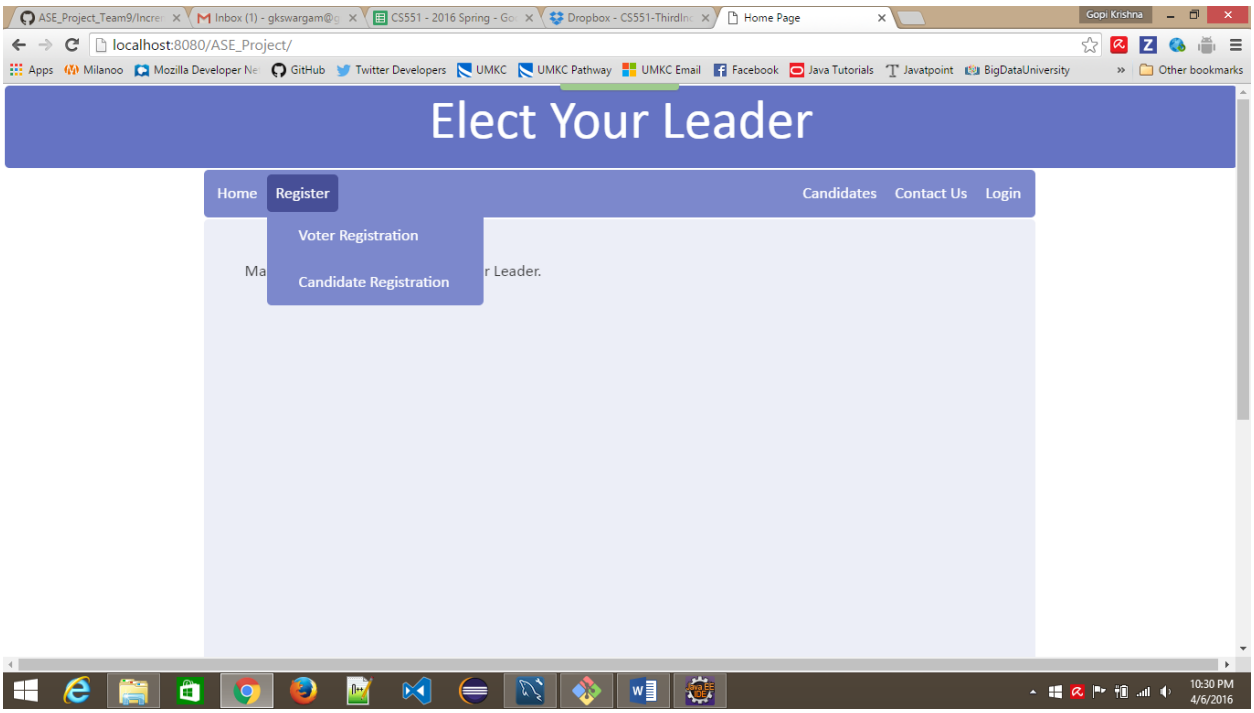
All the user interfaces, validations, database connections, data insertions, login functionality, password recovery functionality, reading data and database tables are tested by deploying them to tomcat server through Eclipse IDE. Complete code after Increment3 is available at below link in GitHub:

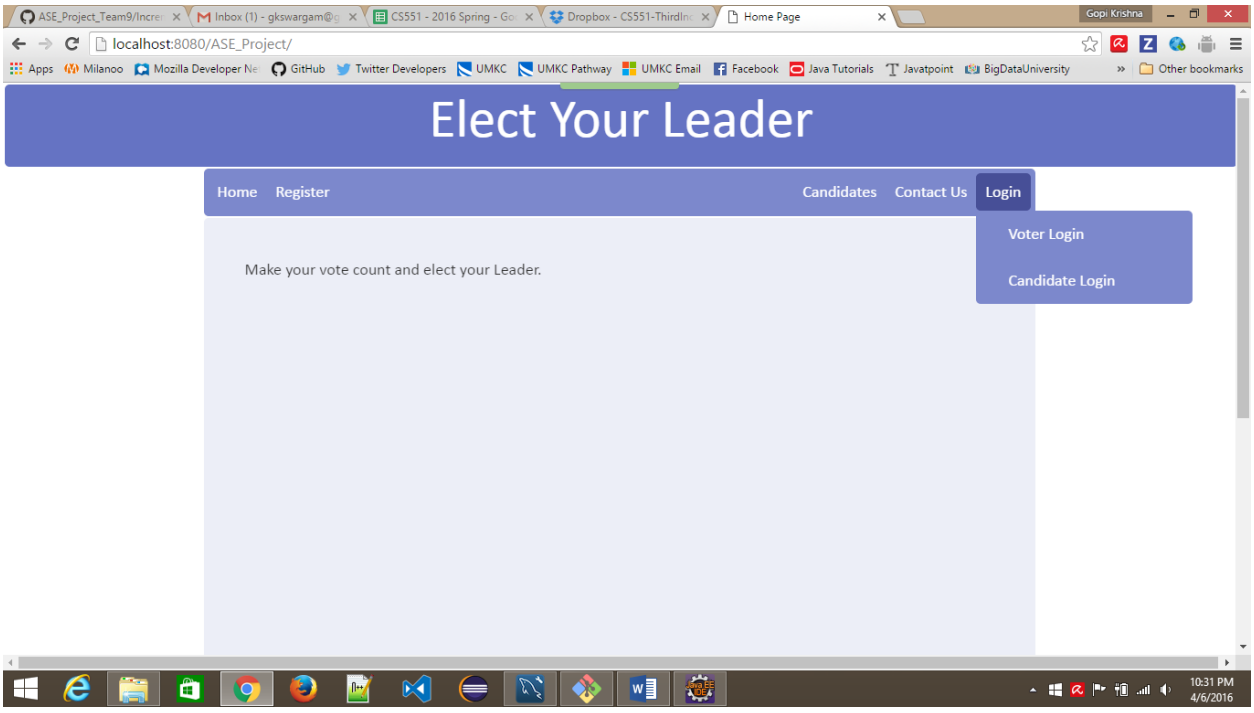
https://github.com/gkswargam/ASE_Project_Team9/tree/master/Increment3/Source

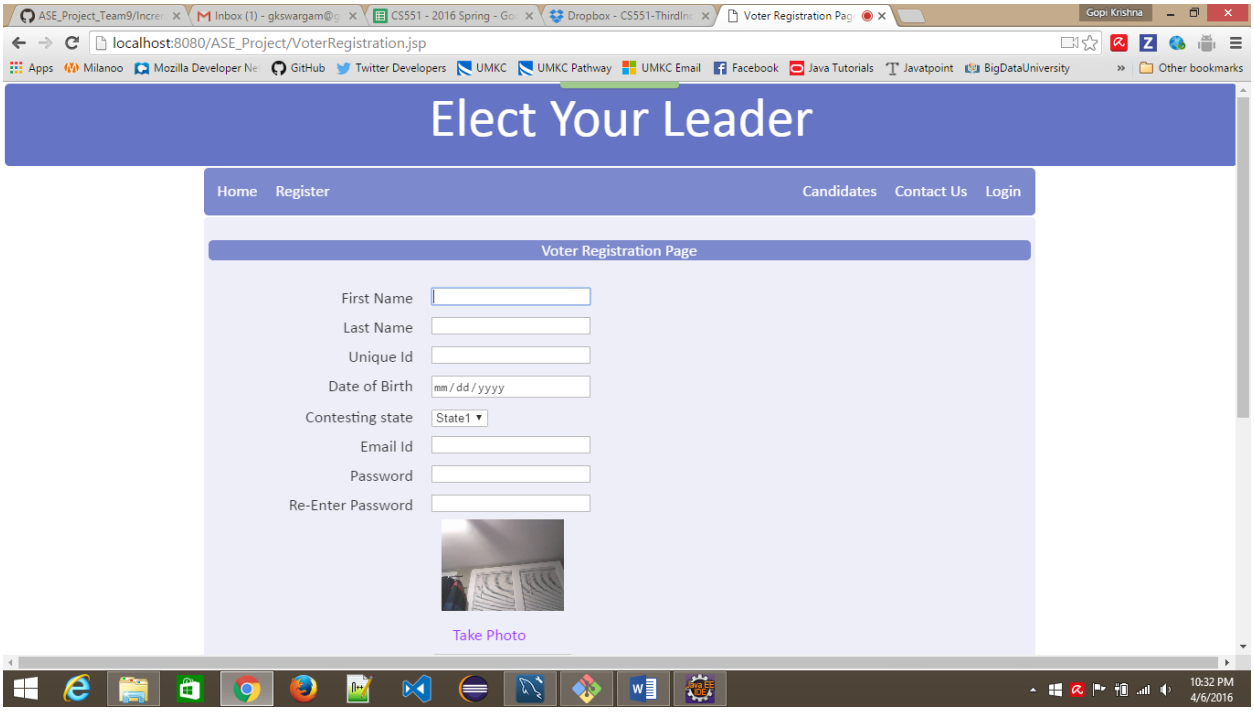
Below are the screenshots for testing through Eclipse IDE and MYSQL:

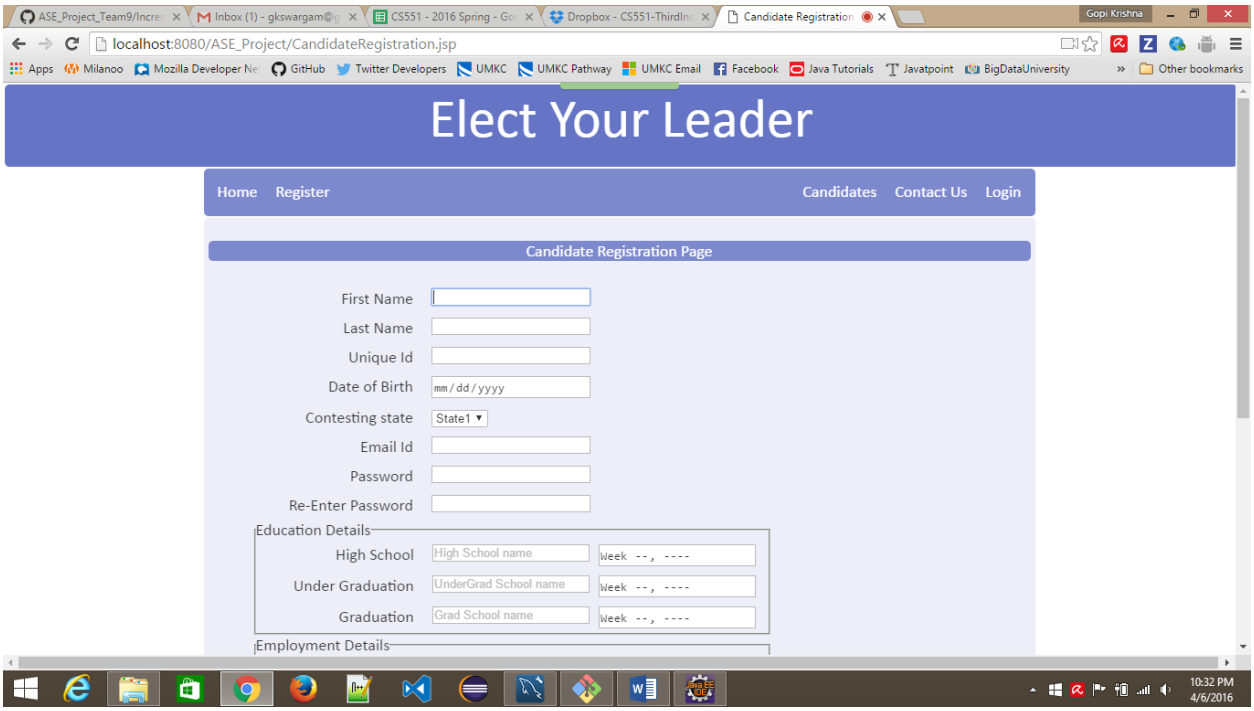
User Interfaces:

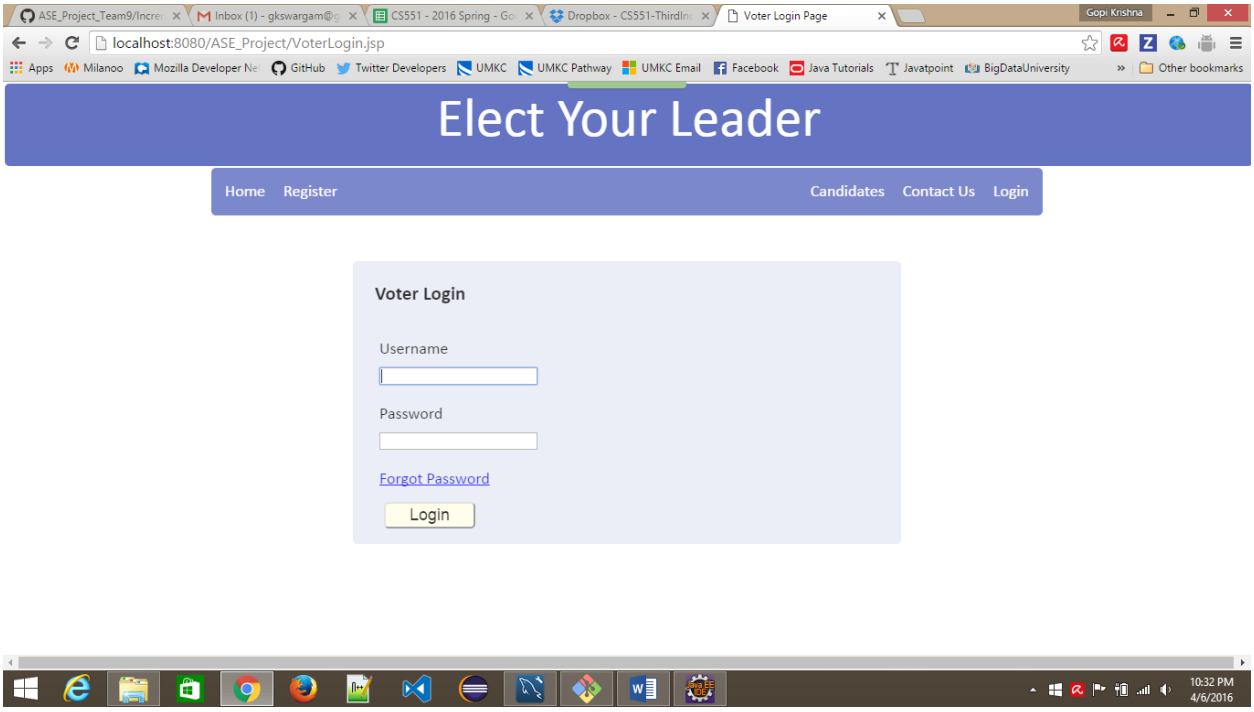


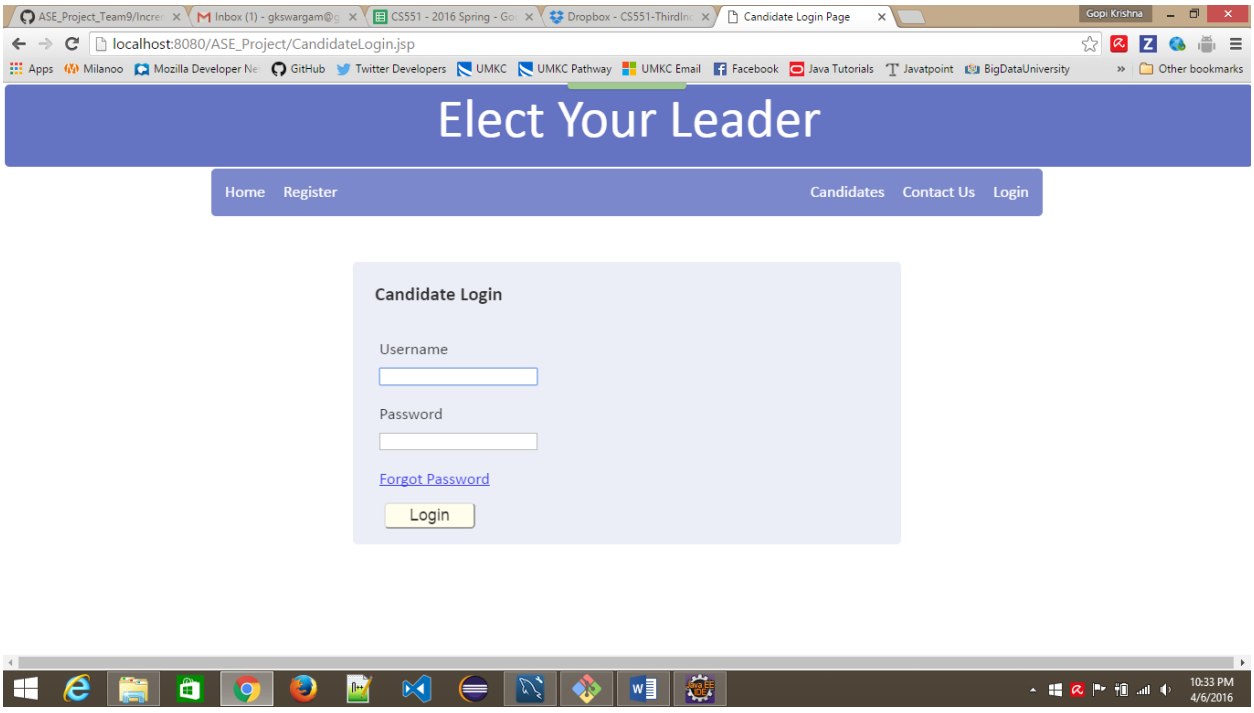



Home Page
localhost:8080/ASE_Project/
Elect Your Leader
Home
Register
Candidates
Contact Us
Login
Voter Login
Candidate Login
Make your vote count and elect your Leader.
10:31 PM
4/6/2016

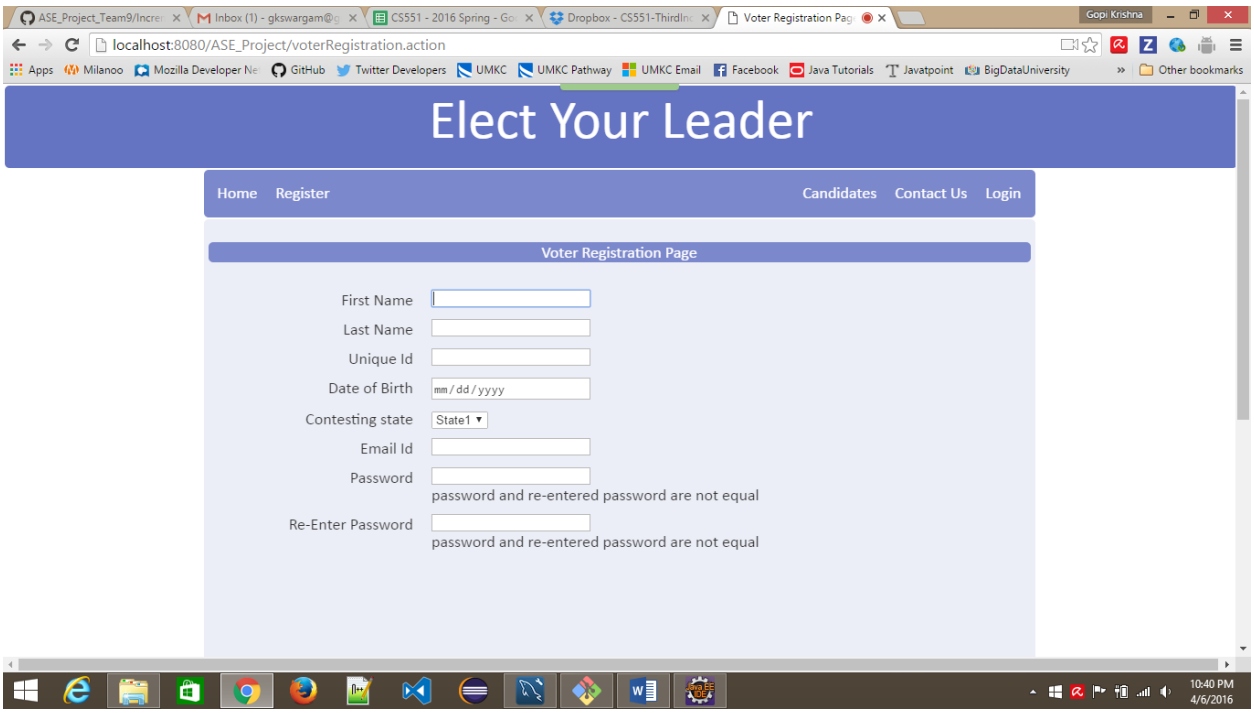

Voter Registration Pag
localhost:8080/ASE_Project/VoterRegistration.jsp
Elect Your Leader
Home
Register
Candidates
Contact Us
Login
Voter Registration Page
First Name
Last Name
Unique Id
Date of Birth
mm/dd/yyyy
Contesting state
State1
Email Id
Password
Re-Enter Password
Take Photo
10:32 PM
4/6/2016

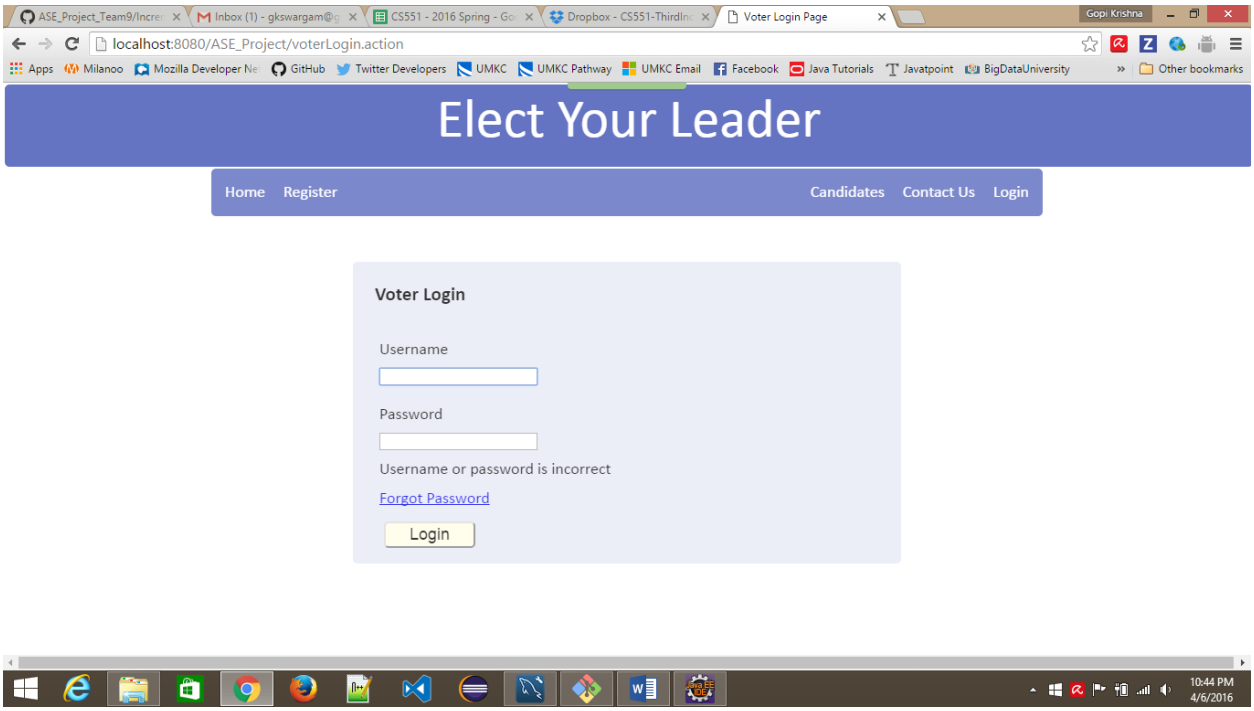

Candidate Registration
localhost:8080/ASE_Project/CandidateRegistration.jsp
Elect Your Leader
Home
Register
Candidates
Contact Us
Login
Candidate Registration Page
First Name
Last Name
Unique Id
Date of Birth
mm/dd/yyyy
Contesting state
State1
Email Id
Password
Re-Enter Password
Education Details
High School
High School name
Week --, ----
Under Graduation
UnderGrad School name
Week --, ----
Graduation
Grad School name
Week --, ----
Employment Details
10:32 PM
4/6/2016

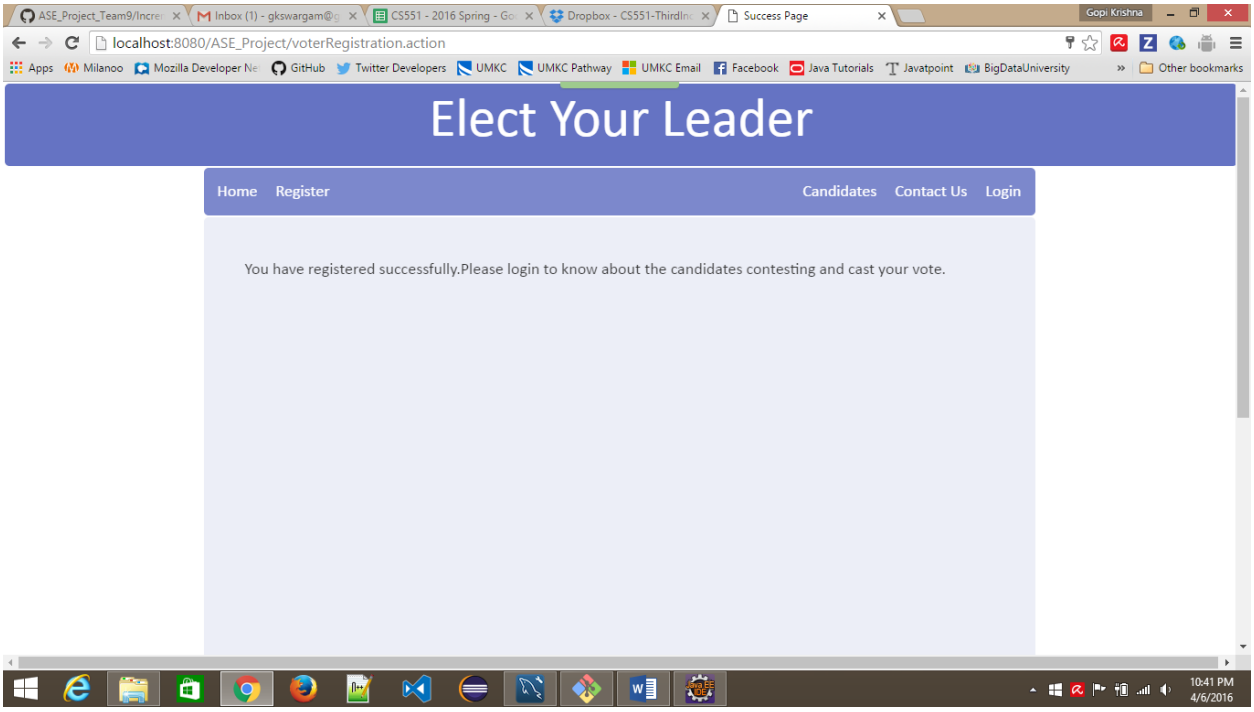

Voter Login Page
localhost:8080/ASE_Project/VoterLogin.jsp
Elect Your Leader
Home
Register
Candidates
Contact Us
Login
Voter Login
Username
Password
Forgot Password
Login
10:32 PM
4/6/2016

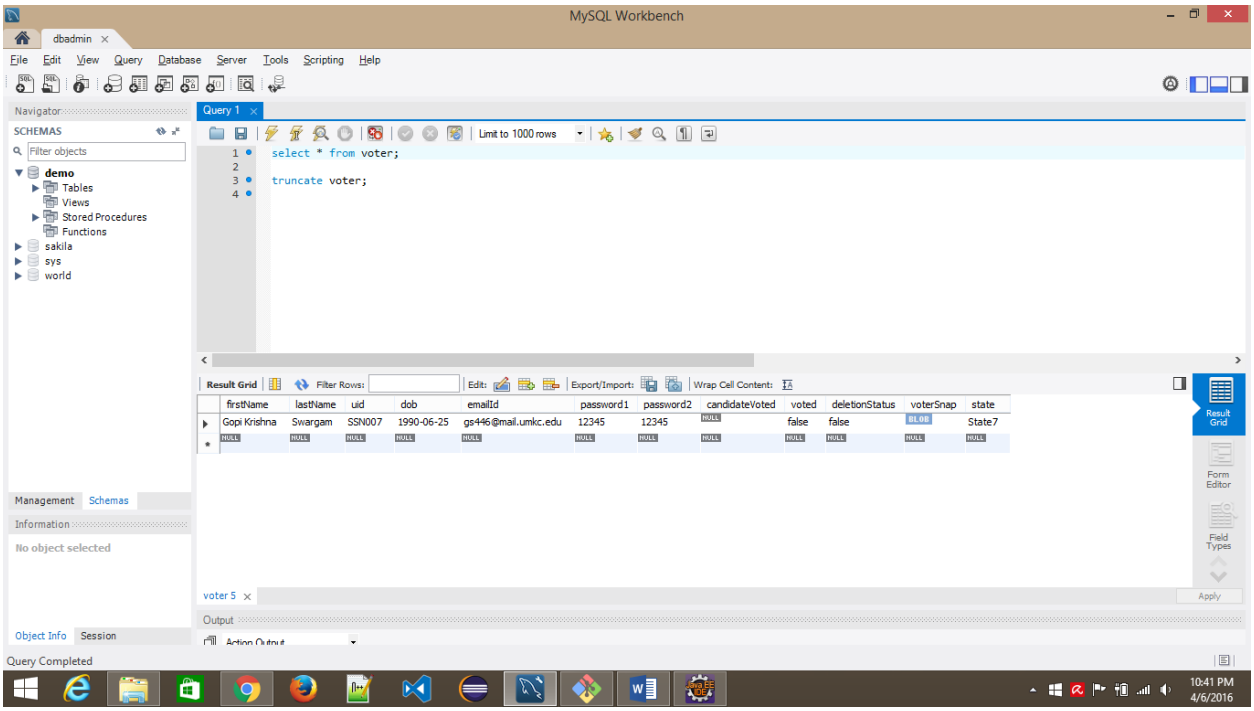


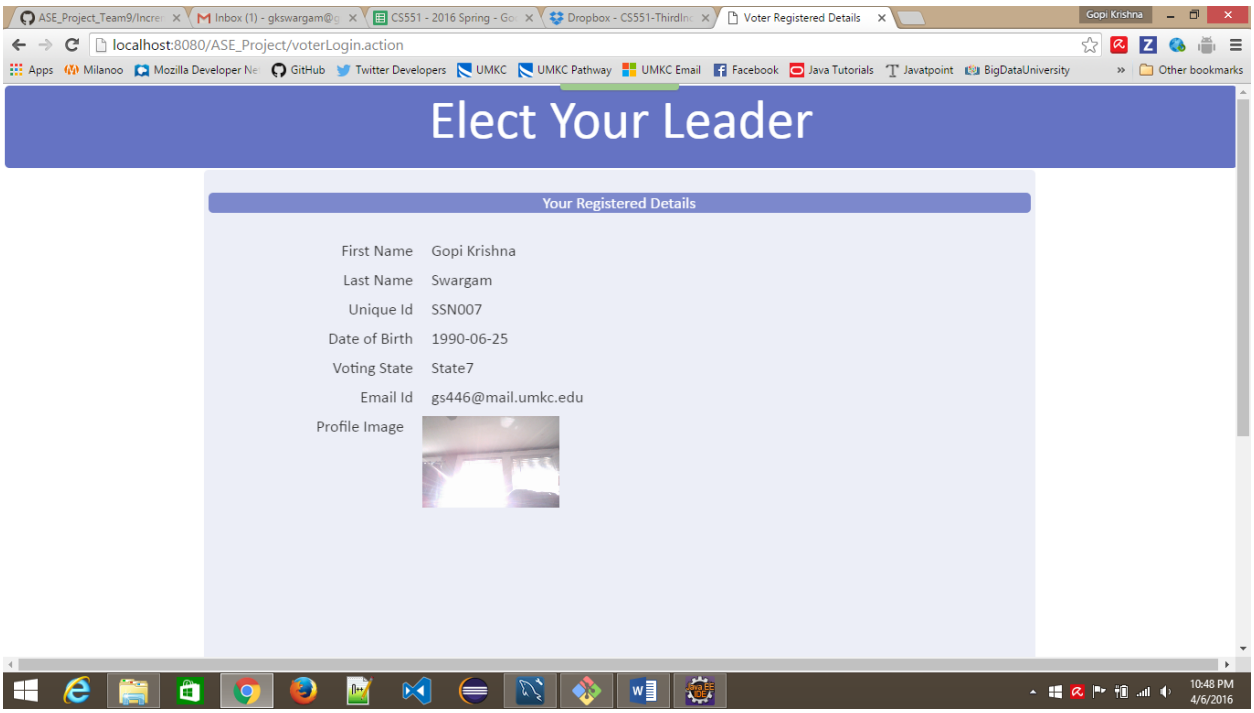
Validations, Data insertions, reading data:

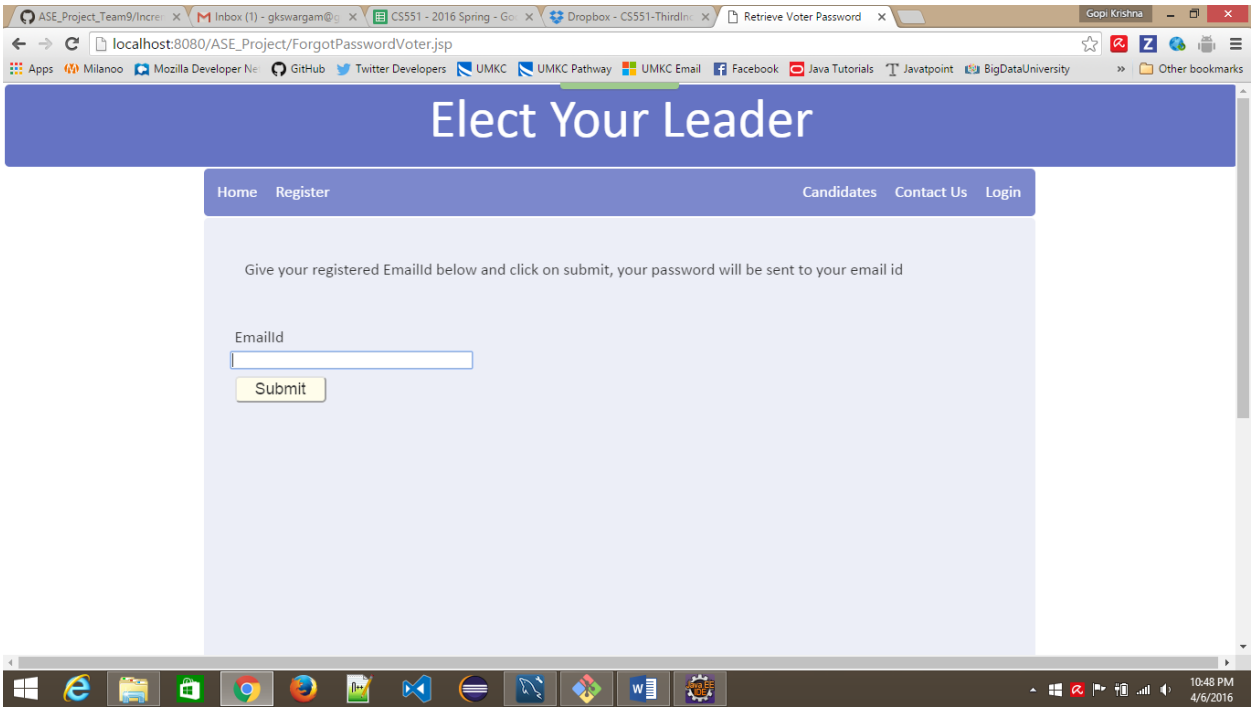


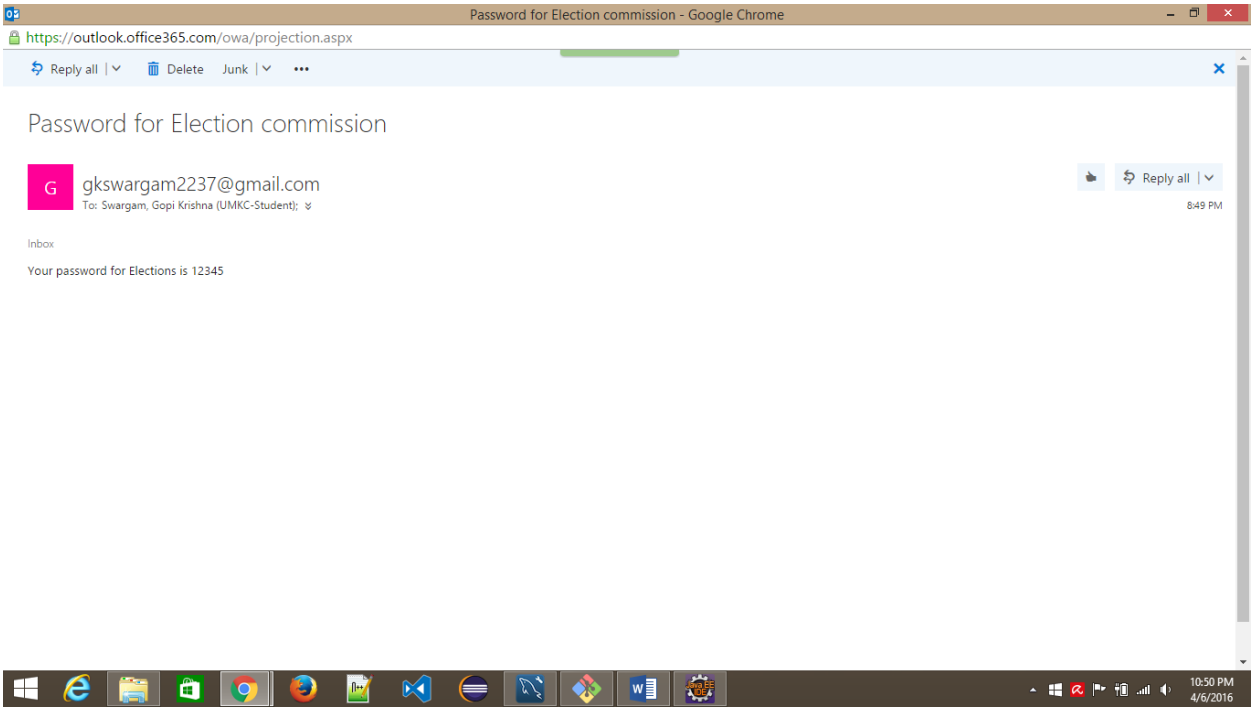

Voter Login Page
localhost:8080/ASE_Project/voterLogin.action
Elect Your Leader
Home
Register
Candidates
Contact Us
Login
Voter Login
Username
Password
Username or password is incorrect
Forgot Password
Login


Success Page
localhost:8080/ASE_Project/voterRegistration.action
Elect Your Leader
Home
Register
Candidates
Contact Us
Login
You have registered successfully.Please login to know about the candidates contesting and cast your vote.


MySQL Workbench
dbadmin
File Edit View Query Database Server Tools Scripting Help
Navigator
SCHEMAS
Filter objects
demo
Tables
Views
Stored Procedures
Functions
sakila
sys
world
Query 1
Limit to 1000 rows
1 select * from voter;
2
3 truncate voter;
4
Result Grid
Filter Rows:
Edit:
Export/Import:
Wrap Cell Content:
firstName lastName uid dob emailId password1 password2 candidateVoted voted deletionStatus voterSnap state
Gopi Krishna Swargam SSN007 1990-06-25 gs446@mail.umkc.edu 12345 12345 NULL false false BLOB State7
NULL NULL NULL NULL NULL NULL NULL NULL NULL NULL NULL NULL
Management Schemas
Information
No object selected
Object Info Session
voter 5
Output
Action Output
Query Completed
10:41 PM
4/6/2016


Gopi Krishna
Voter Registered Details
localhost:8080/ASE_Project/voterLogin.action
Apps Milanoo Mozilla Developer Ne GitHub Twitter Developers UMKC UMKC Pathway UMKC Email Facebook Java Tutorials Javatpoint BigDataUniversity Other bookmarks
Elect Your Leader
Your Registered Details
First Name Gopi Krishna
Last Name Swargam
Unique Id SSN007
Date of Birth 1990-06-25
Voting State State7
Email Id gs446@mail.umkc.edu
Profile Image
10:48 PM
4/6/2016


Retrieve Voter Password
localhost:8080/ASE_Project/ForgotPasswordVoter.jsp
Elect Your Leader
Home
Register
Candidates
Contact Us
Login
Give your registered EmailId below and click on submit, your password will be sent to your email id
EmailId
Submit
10:48 PM
4/6/2016


Password for Election commission - Google Chrome
https://outlook.office365.com/owa/projection.aspx
Reply all
Delete
Junk
Password for Election commission
gkswargam2237@gmail.com
To: Swargam, Gopi Krishna (UMKC-Student);
Reply all
8:49 PM
Inbox
Your password for Elections is 12345
10:50 PM
4/6/2016

VII. Implementation

All the user interfaces are developed using html and css.

Validations have been checked through html and Java.

Database tables are created using MYSQL.

Data insertions, reading data, login functionality and password recovery functionality are implemented using Java.

VIII. Deployment

All the features developed are working as expected, have been tested by deploying to Tomcat server through Eclipse.

All the artifacts for Increment3 are at below link

https://github.com/gkswargam/ASE_Project_Team9/tree/master/Increment3

IX. Project Management

Work Completed

Description

In Increment3 we have completed the below

- Developed all the user interfaces required for the project.
- Written validations code for all the data that is being passed to the database.
- Created the database tables required for the project.
- Inserted the registration data in to database tables.
- Implemented the login functionality.
- Implemented the password recovery functionality.
- Read data from database and displayed.
- Password encryption and decryption

- **Responsibility**
  (1) Email functionality — Alsofyani,Mohannad Eida M
  (2) Login functionality, password encryption/decryption — JyothiKiran Nandanamudi
  (3) Accessing camera plugin and take snapshot — Sidrah Junaid
  (4) Data insertion and reading data — Gopi Krishna Swargam
- **Time taken** 300 hours
- **Contributions**
  (1) Gopi Krishna Swargam 25%
  (2) Nandanamudi Jyothikiran 25%
  (3) Sidrah Junaid 25%
  (4) Alsofyani,Mohannad Eida M 25%

Bibliography

http://www.codejava.net/