

12/04/2017

**Attendance & Feedback Portal** 

**Project Increment 4 Report** 

# **School Matters!**



Team 6 (Mavericks):
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#### I. Introduction:

A Web portal is an exclusively designed web application that can provide information from different sources and the content that displayed varies depending upon the intended user and the intended purpose. UMKC Attendance & Feedback is a portal which can be used by UMKC students and professors. Students can submit the attendance and feedback through this portal upon enrolment to their respective courses for the semester. And professors can track the data related to each student's presence, feedback and suggestions from the portal.

#### II. Project Goal and Objectives:

Overall Goal: The existing UMKC Attendance Application enables students to submit code for attendance submission. This existing application can be enhanced as a web portal for the students to register. Depending upon the term and courses enrolled, students can easily have access to view the calendar, corresponding schedule for the date and submit the feedback for their presence. Each professor can pull out information regarding the attendance and feedback. So, the main agenda of this is to create a portal collectively which makes it flexible for students to submit the attendance & feedback instead of spending time in fetching links of the forms and submitting it externally.

Initially every intended user (student, professor and admin) must register and login to access the portal. Upon login, each student should submit the details of the enrolled courses for the semester. The student can then view a scheduled calendar which will display the courses enrolled in. On clicking on the date, the user can submit the feedback and attendance form. The professors can login to the portal and can download/export the sheets for the attendance and feedback depending upon the submission received from the students for a date. The admin has rights to view access and maintain the entire data of the application.

**Specific Objectives:** A Web Portal-UMKC Attendance and Feedback, for availing students and professors to easily submit and access the attendance and feedback forms for courses enrolled.

#### **Specific Features:**

- 1. Login/Register Pages: Student, Professor and Admin Login/Registration Pages.
- 2. Pop-up Dialog box for details regarding courses enrolled.
- 3. Scheduled calendar page which allows students to view their schedule for the courses enrolled and submit attendance/feedback forms.
- 4. Acknowledgement for attendance/feedback submissions.
- 5. Location and time capture through API's.
- 6. Sentimental Analysis for feedback submitted by students.
- 7. Auto generating the reports of attendance/feedback for the professors.
- 8. Database (MongoDB) to store the details.

#### **Enhancements:**

Detailed information on student holds.

Automatic calculation of attendance percentage per student for each course attended.

#### Significance:

Flexible and quick submission of attendance and feedback using a single form access rather than submitting multiple forms explicitly.

Improved accessibility to track and manage student attendance and feedback.

Positive and negative feedback analysis.

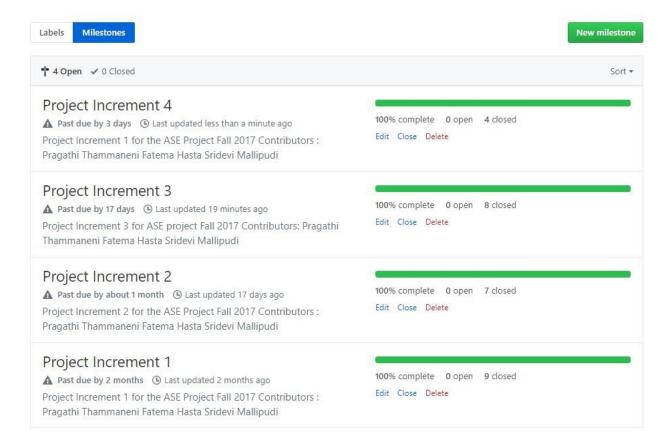
Location and Time tracking of each submission.

#### **Outcome:**

This application is easily accessible and collectively helps students and professors with an easy submission, tracking the feedbacks with a single login instead of searching the links and submitting each form.

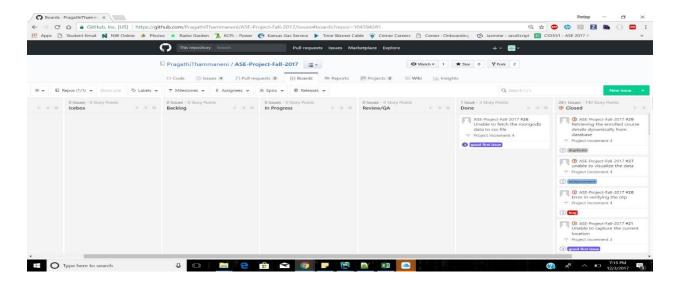
#### III. Project plan using Zen hub tools:

#### **Schedule for four increments:**



#### **Project Timelines, Members, Task Responsibility:**

The below are the issues raised during the increment 3 and moved them to closed state once the individual task is done.



#### **Burndown Chart:**

- 1.Design and Architecture
- 2.Login, Register user interface
- 3.UML diagrams
- 4.Development & Testing

# Project Increment 4 Project Increment 1 for the ASE Project Fall 2017 Contributors : Pragathi Thammaneni Fatema Hasta Sridevi Mallipudi Start: Nov 16, 2017 Change Due: Dec 1, 2017 Change Labels v In Show Pull Requests Burndown report Weekends — Ideal — Completed Weekends — Ideal — Completed 10 Total Story Points 7 Completed / 3 Remaining 4 Total Issues 3 Completed / 1 Remaining

#### **IV. Fourth Increment Report:**

**UMKC Attendance and Feedback Portal -** A Web Application that avails students and professors to easily submit and access the attendance and feedback forms for courses enrolled.

Existing services/REST API: For this increment, we have used google calendar API, Watson Sentimental Analysis API, Geo Location API, Google charts Visualization API and MongoDB for storage.

#### **Detailed Design of features:**

#### Wireframes and Mock-ups:

Below are the wireframes and mock-ups for the UMKC Attendance & Feedback Portal.

#### 1. Main Page:



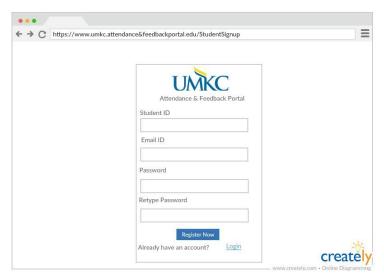
#### 2. Login 's: (Student/Faculty) Student Login:



#### **Faculty Login:**



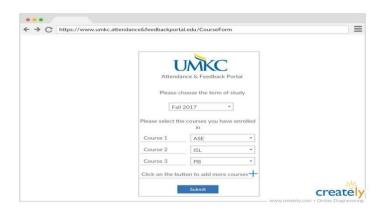
#### **Student Registration:**



#### **Faculty Registration:**

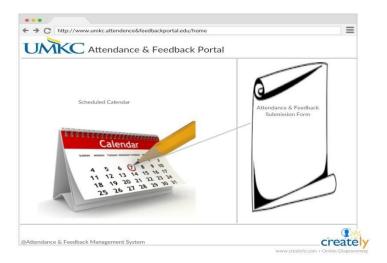


#### **Course Details:**



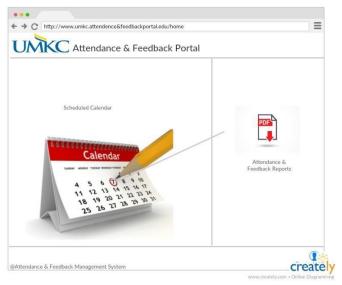


#### **Home Page for Student:**



# <u> Attendance & Feedback Portal</u>

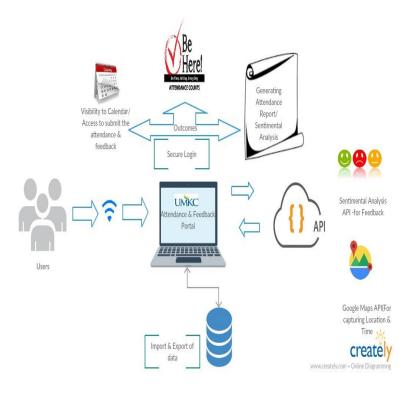
#### **Home Page for Professor:**



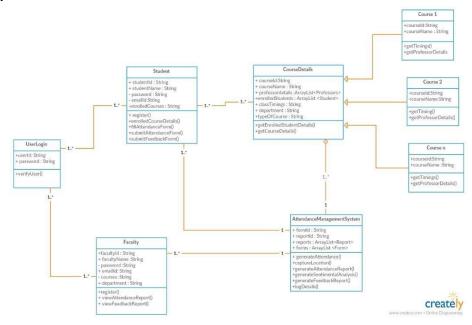
#### **Architecture/Sequence/Class Diagrams:**

Below diagrams explains the architecture of the entire web application and the relations among the actors.

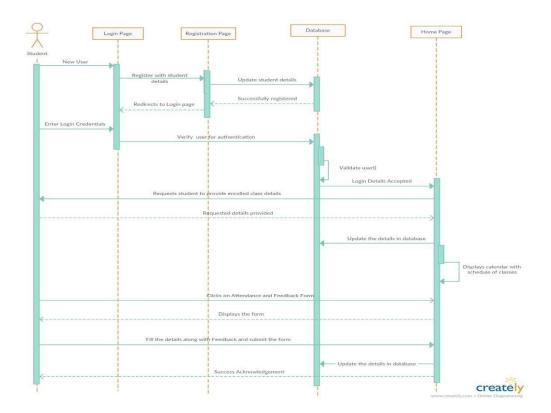
#### **Architecture Diagram:**

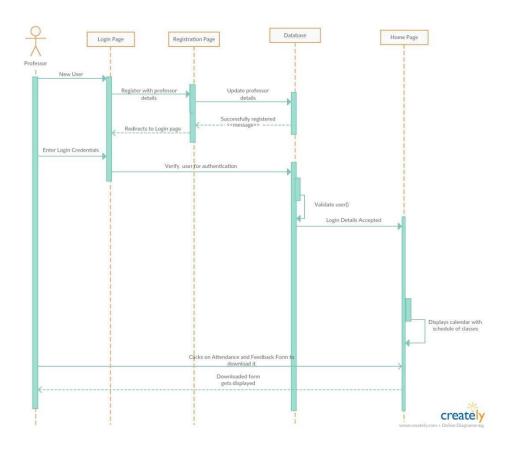


#### **Class Diagram:**



**Sequence Diagrams**: Below sequence diagrams explains the sequence of each flow with respect to student/faculty activities.

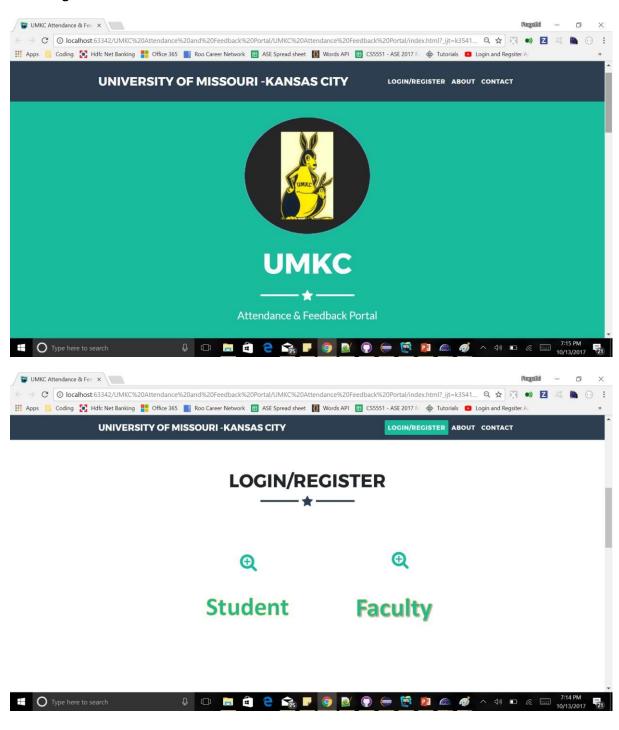


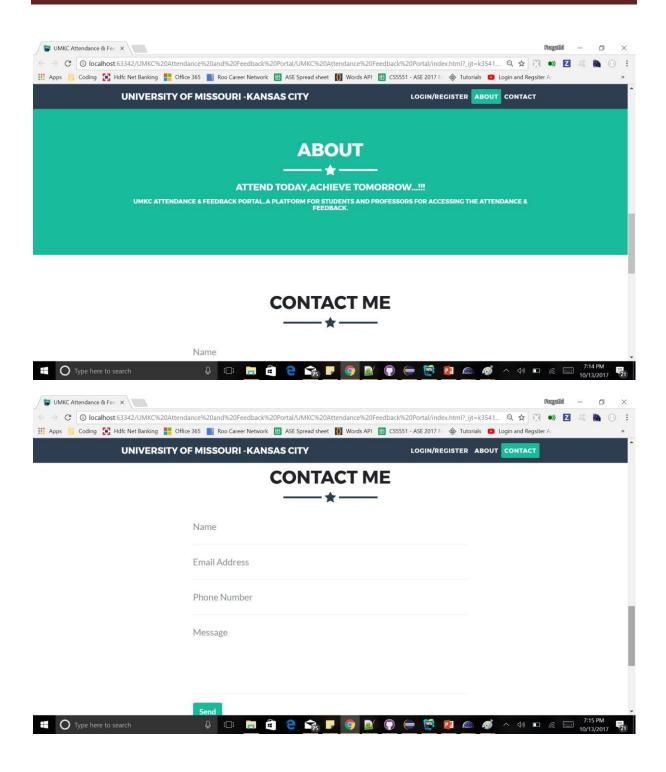


#### Implementation:

UMKC Attendance & Feedback portal:

#### **Index Page:**



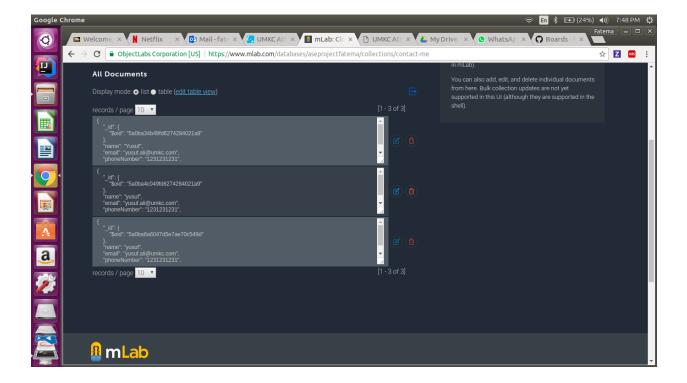


#### Saving the details of Contact Me to the Mongo Db:

Whenever the user wants to contact the admin of this application about any issues regarding can drop the details. These details can be saved in the Mongo db. So that the data can be retrieved for contacting them.

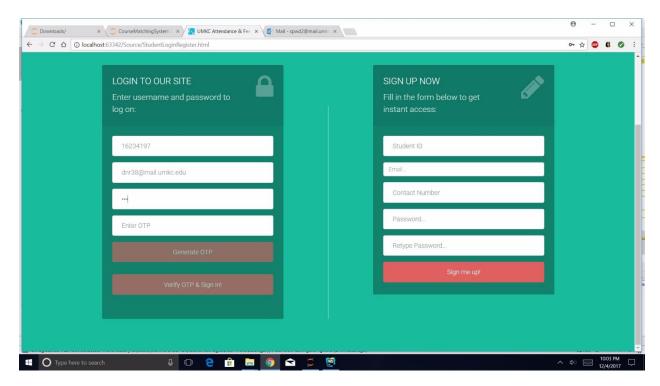
## <u> Attendance & Feedback Portal</u>

```
2017-11-16T10:41:49.898-0600
fatema@fatema-Inspiron-5559:-$ sudo mongoexport --host=ds257495.mlab.com:57495 --db-aseprojectfatema --collection=student-user -u root -p root 23 -csv --out fields.csv -rields user-range, emailid, contactNumber csv flag is deprecated; please use --type=csv instead csv -fields user-range and contact conta
```

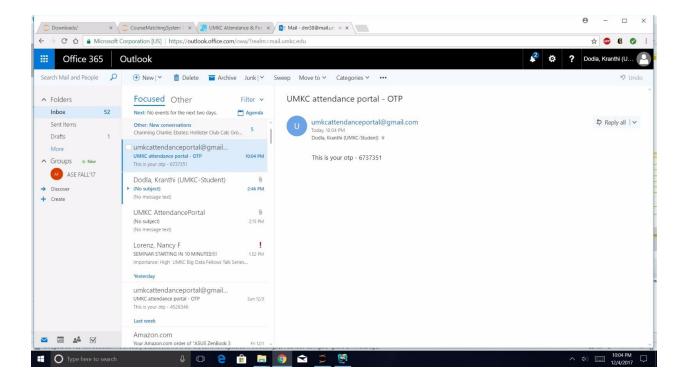


## <u> Attendance & Feedback Portal</u>

#### Login & Registration(Student):



In order to login to the application, otp is generated and email is sent to student email. Students has verify the otp, after verification the page will be navigated to the main page of the application.

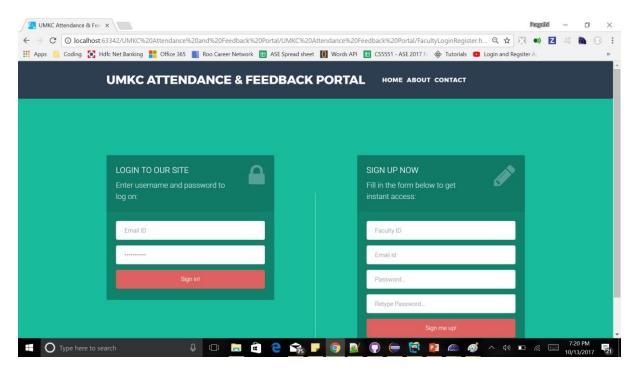


OTP generation code is done using Google Authenticator which provides the utilities for secret key generation which is SHA1. It has 2 main functions:

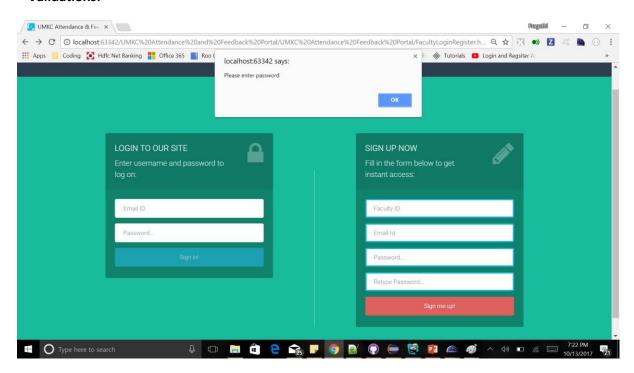
- 1. encodeKey()
- 2. decodeKey()

They both accept a string which needs to be either encoded or decoded. The encoded code has a time-interval which can be set to any interval we set it to 30 secs. On click of submit attendance form button, an OTP code will be generated and will be sent to the registered mail.

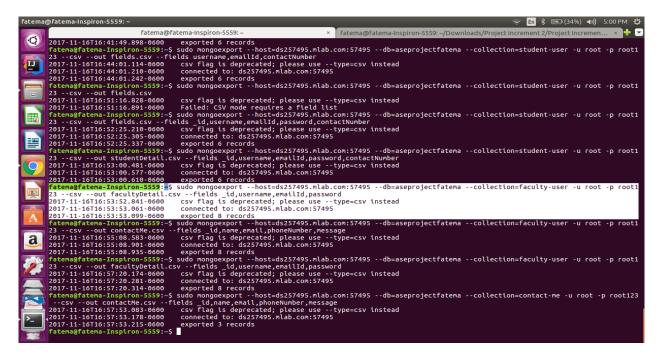
#### Login & Registration(Faculty):

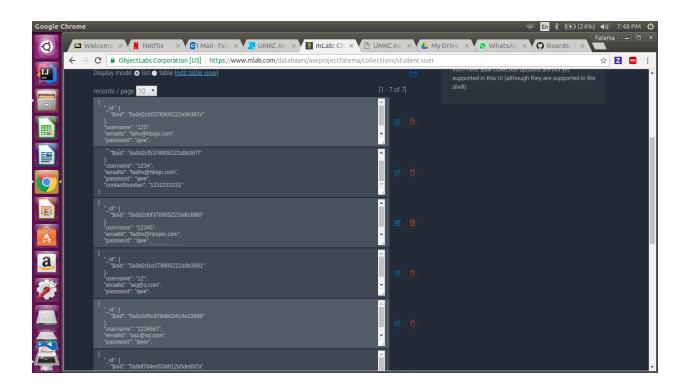


#### Validations:

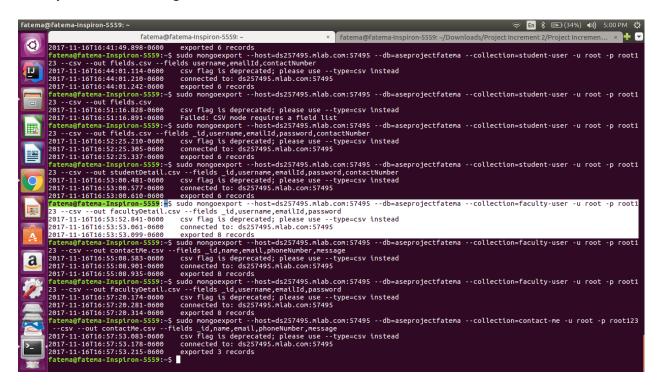


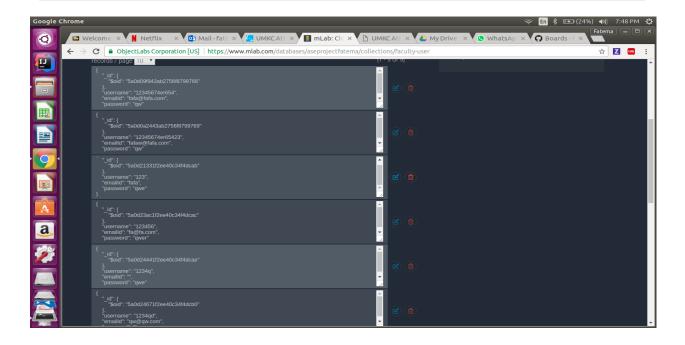
The registered student and faculty will be stored in mongo db for further operations.





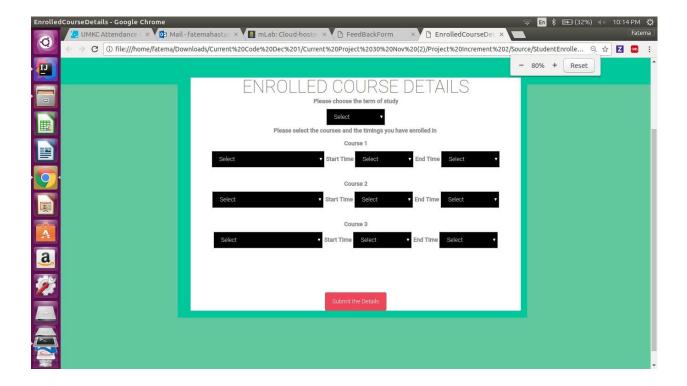
#### **Faculty Collection in Mongo db:**





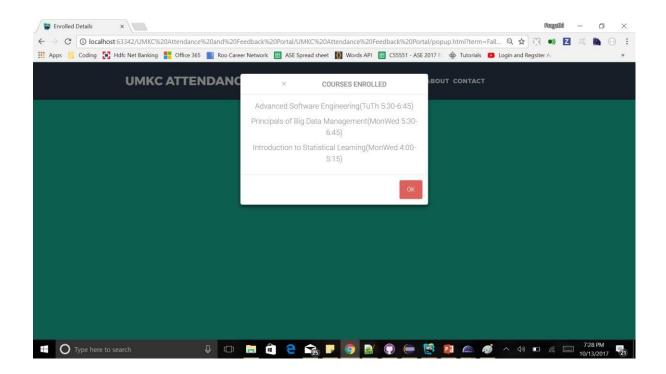
#### **Enrolled course details screen:**

When the student first time signs up for the application enrolled course details screen will be displayed to the user. This allows user to specify the courses student has enrolled for the particular semester.



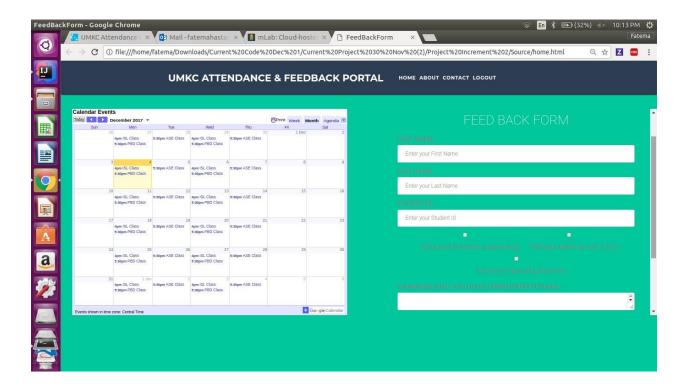
## <u> Attendance & Feedback Portal</u>

#### Pop-Up Message:



#### **Home Page:**

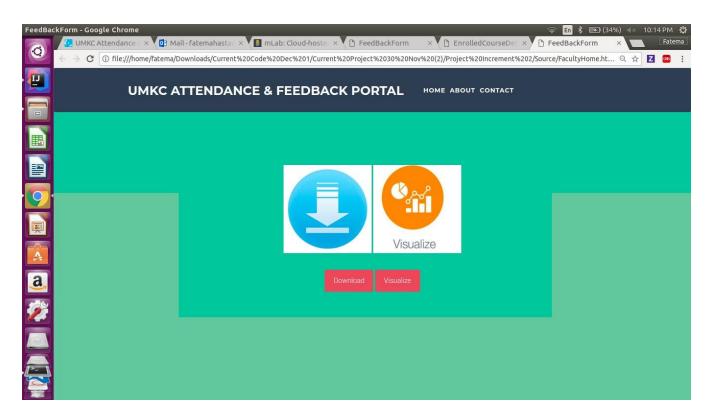
In home page google calendar is displayed which has dynamic events based upon the courses that student enrolled. These recurring events which repeat only on particular days on which student has classes. We have used google app script for retrieving and generating the events dynamically.



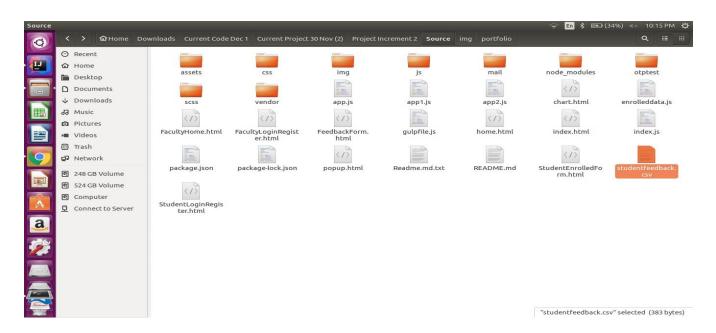
When the user submits the feedback form the current location of the user is found in the background with the help of geo location API and sentiment analysis is done for the feedback submitted by the user. All these details are stored in mongo db and used to generate the reports for faculty.

#### **Faculty Home Page:**

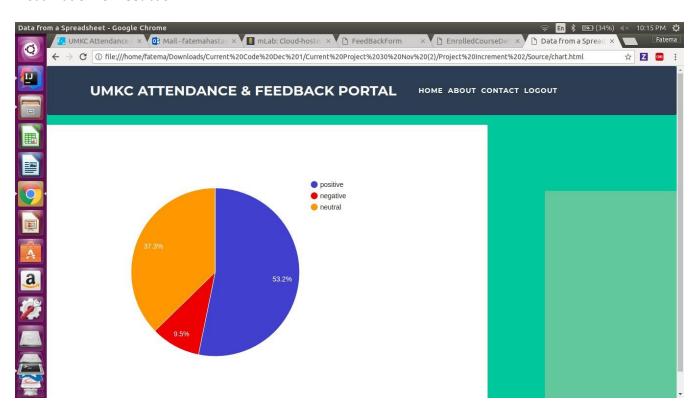
In faculty home screen download and visualization buttons are present to get the attendance reports and to visualize the feedback given by the students.



Documents that are downloaded are stored in the local machine as shown below:



#### **Visualization for Feedback:**



#### **Testing:**

S.No	Test Case	Description	Expected Outcome	Result
1.	Issue in verification the OTP which has generated	The OTP received for the student whenever should be verified.	The OTP successfully verified for the login user.	PASS
2.	Issue while retrieving the data from the mongo Db to export as excel sheet.	The data should be fetched from the mongo Db and should be exported as excel sheet.	Successfully the feedback details are being fetched from the Mongo Db collections and be able to download as an excel sheet.	PASS
3.	Issue while visualizing the feedback data as pie chart.	The data should be visualized as a chart.	Able to visualize the feedback data in the form of pie chart.	PASS

#### **Deployment:**

We have deployed the application in web browser and captured the screenshots. Explained each feature in the Wireframes & implementation

#### GitHub URL for project source code and documentation:

https://github.com/PragathiThammaneni/ASE-Project-Fall-2017/tree/master/

#### **Project Management:**

Technologies Used: Bootstrap, Angular JS, HTML, CSS, JavaScript

Software's Used: WebStorm

#### Database:

We have used MongoDB for storing and retrieving the information.

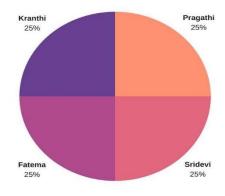
#### **Worked Completed:**

Generating dynamic events recursively for calendar and reports generation for faculty.

#### Responsibility:

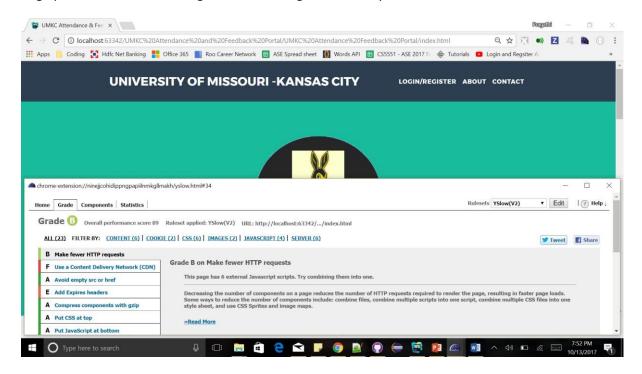
S.No	Team Member Name	Task Assigned	Status
1	Pragathi Thammaneni	UI,Backend,Documentation	Completed
2	Fatema Hasta	UI,Backend,Documentation	Completed
3	Sridevi Mallipudi	UI,Backend,Documentation	Completed
4	Kranthi Dodla	UI,Backend,Documentation	Completed

#### Contributions:



#### **Unit Testing/Performance Testing:**

Page performance and ranking is checked using YSLOW analyser.



#### **Bibliography:**

https://www.w3schools.com/

https://docs.mongodb.com/? ga=2.44347169.466579474.1507930403-192960142.1507930403

https://stackoverflow.com