ASE_Lab4 Report

Ionic Application with Mashup of Web Services

February 23, 2019

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Introduction

Objectives

1. Create an Ionic application using any of the ionic template.
2. It should have Login and Registration Activities.
3. Should build application with 2 webservices mashup and that should be of knowledge/Machine Learning/AI services.
4. Write 3 unit testcases and test for Ionic application.

Features

Below are the features that we implemented as part of this application:

1. Registration with form validation.
2. Login with validation.
3. Implemented “Gender Detection” Machine learning service which detect given name is male or female.
4. Our “Emotion Analysis” service will provide the emotion is positive or negative by given text.

Design/Implementation

We have followed below steps to successfully complete this lab assignment:

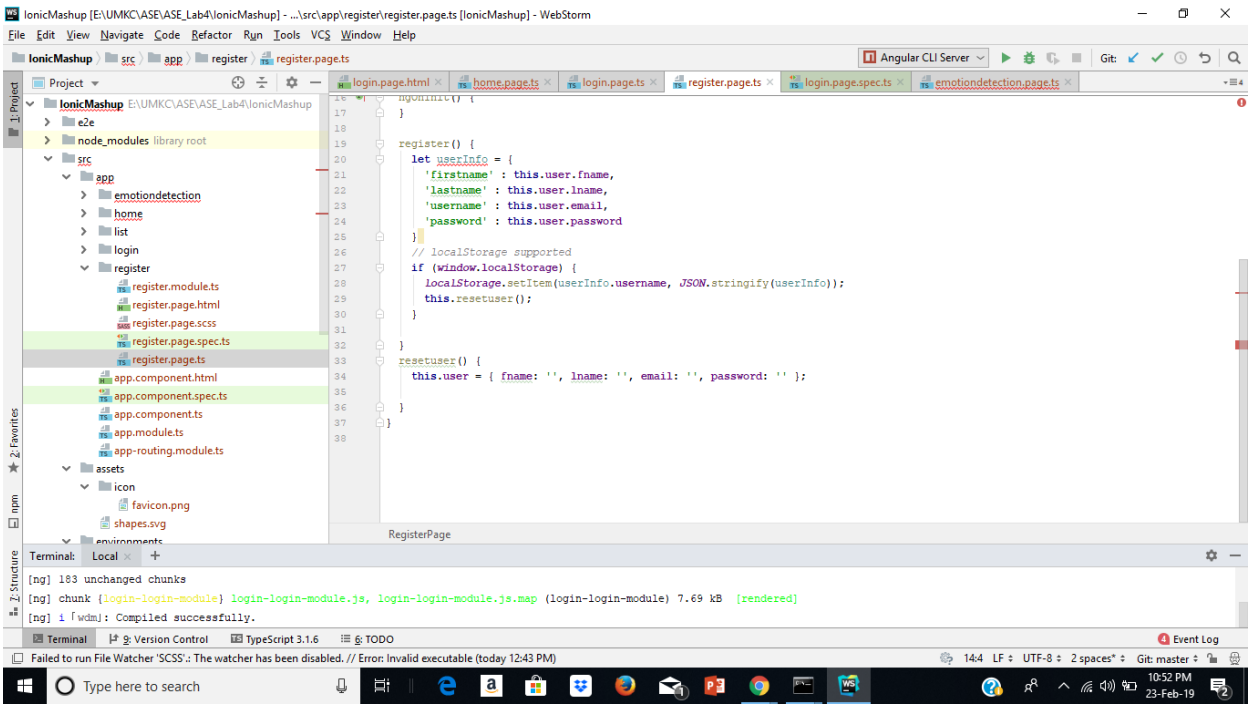
Step -1: We make sure all the pre-requisites are ready before start of the project and below are the technologies/languages used:

1. WebStorm IDE
2. Node
3. Npm
4. Ionic : npm install -g ionic
5. Cordova: npm install -g cordova
6. Angular
7. TypeScript
8. Bootstrap
9. Karma (For Unit testing)

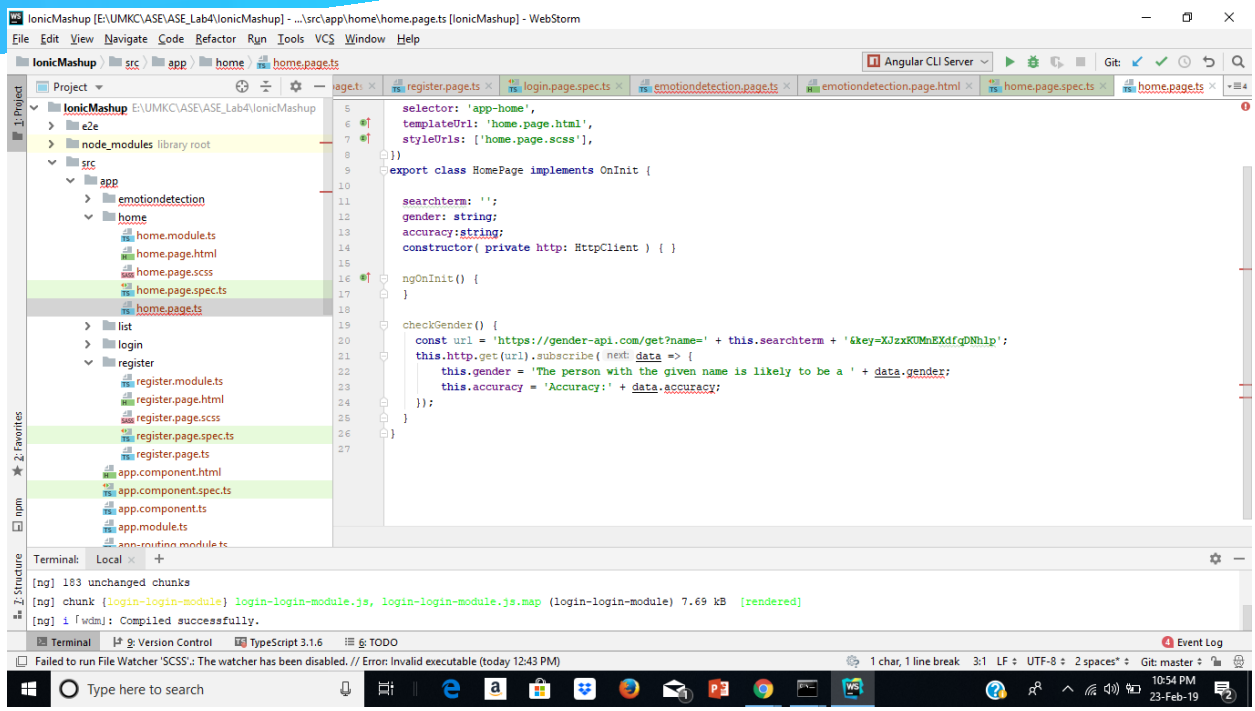
Step-2:

1. Create Ionic application using command : ionic start ionic-app tabmenu
2. Create 3 pages under the project using command : ionic g page login i.e; Register, Login , Homepage

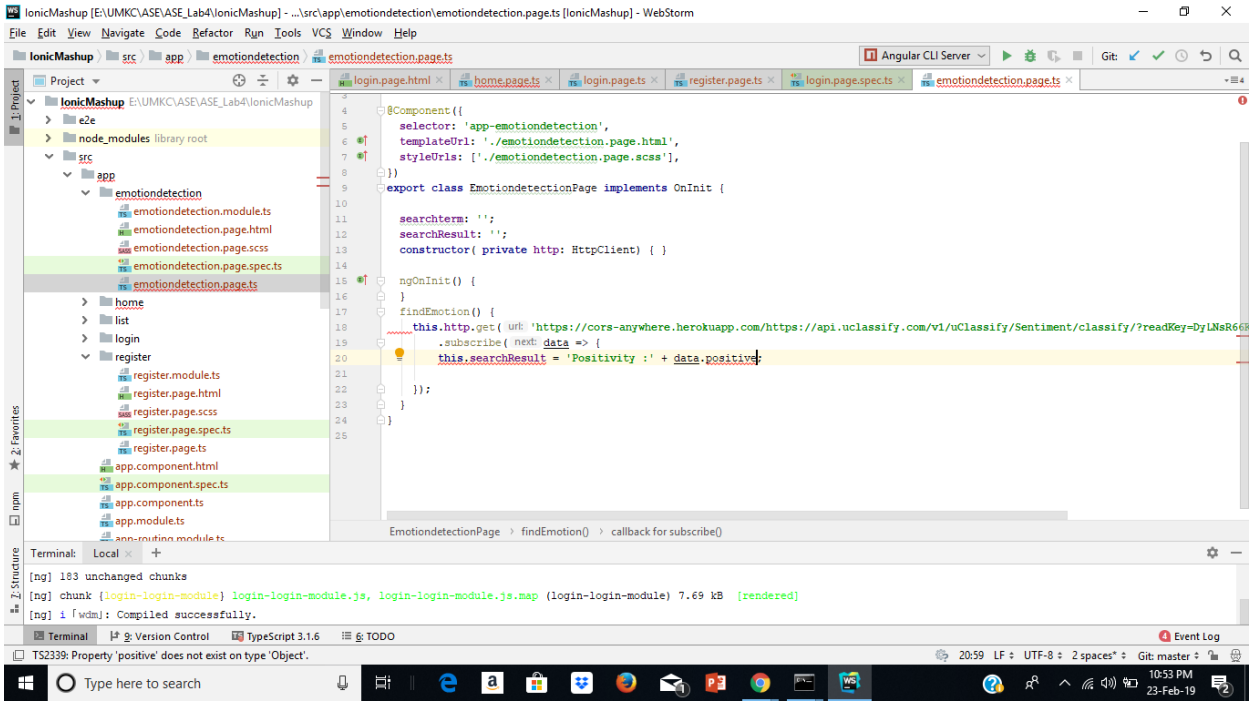
Step-3: Using HTML5 element “localStorage” we are fetching data of the form and storing locally



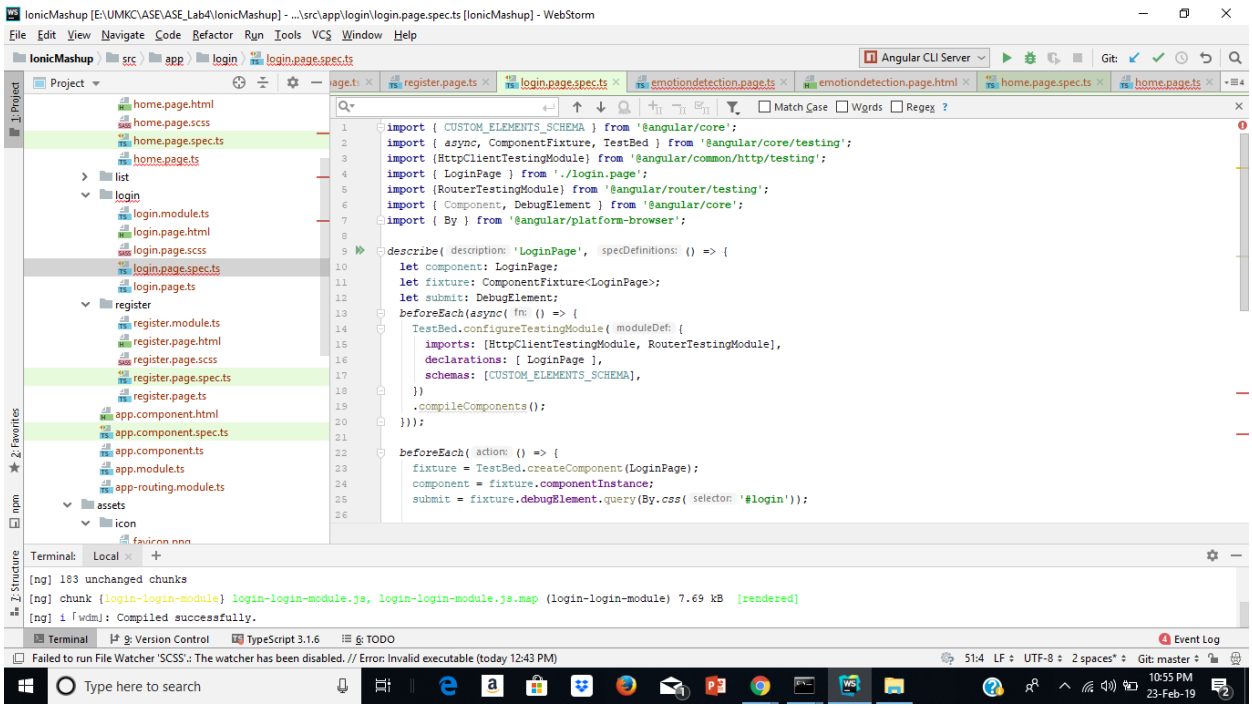
Step-4: We have integrated with “ http://gender-api.com/get?name“ AI API for Gender detection by name with a accuracy

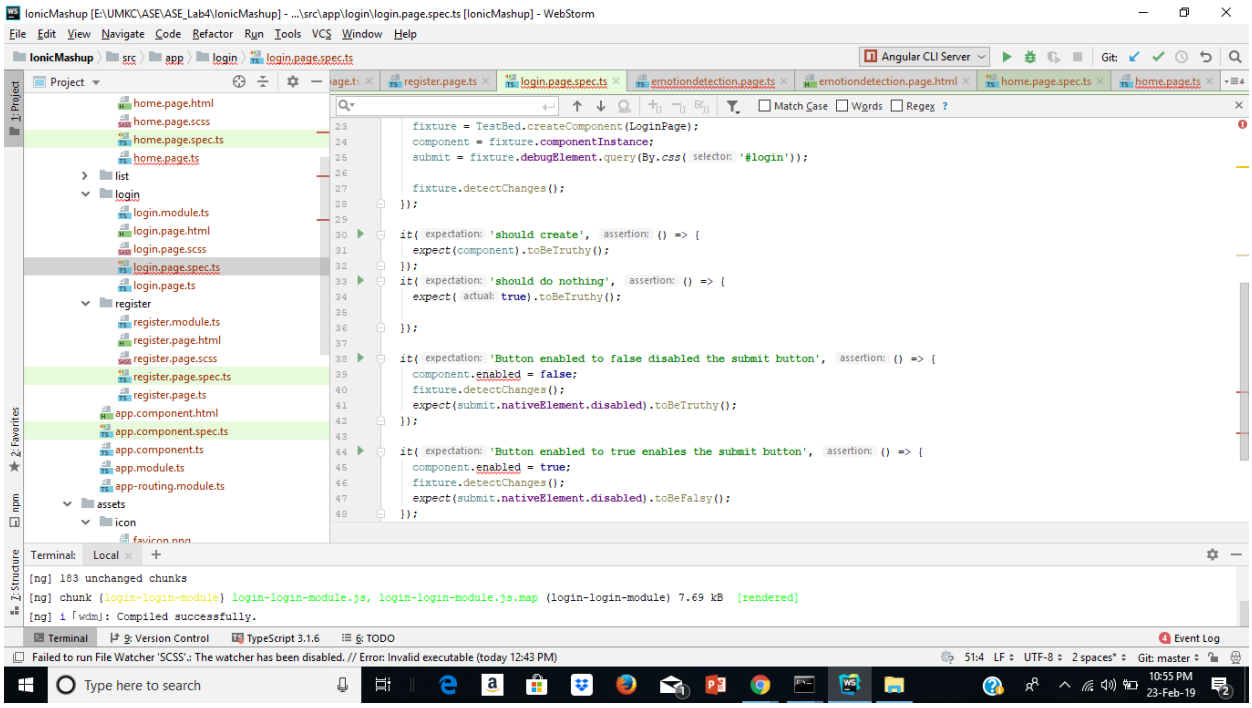


Step-5: We have integrated with “https://core-anywhere.herouapp.com“ AI API for emotion analysis with the given text.



Step-6: Written unit test cases for login module



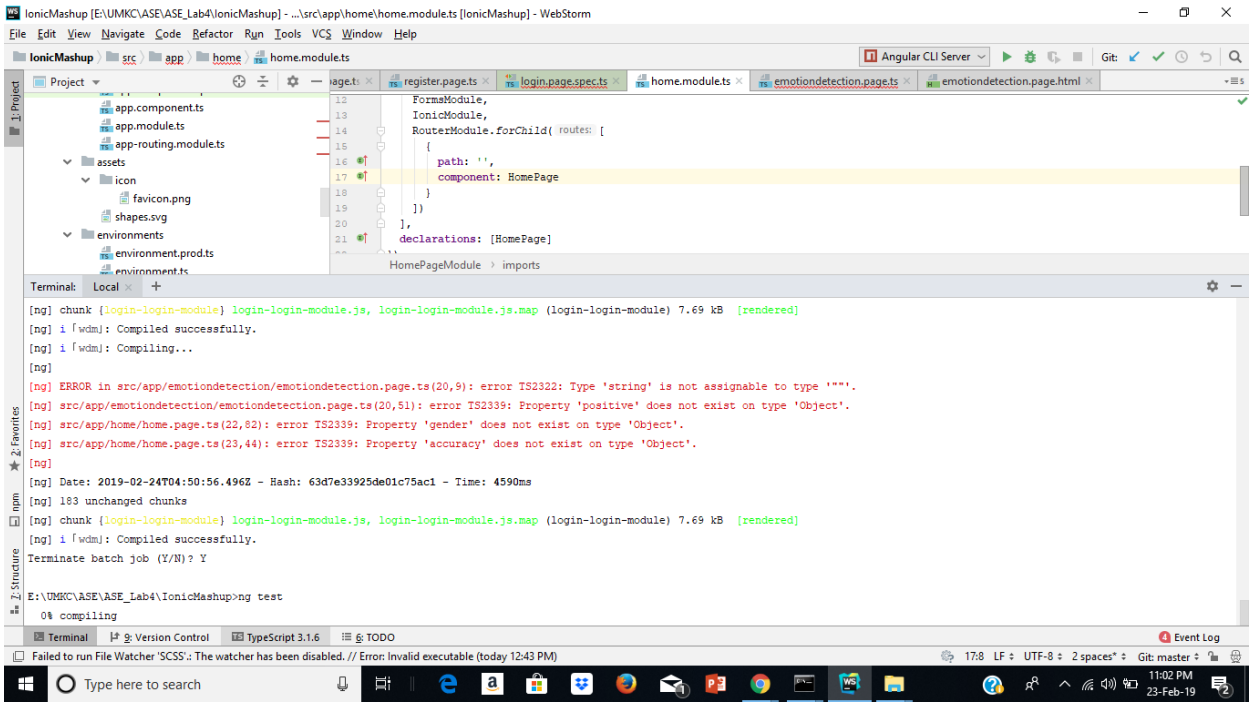


Unit Test Cases:

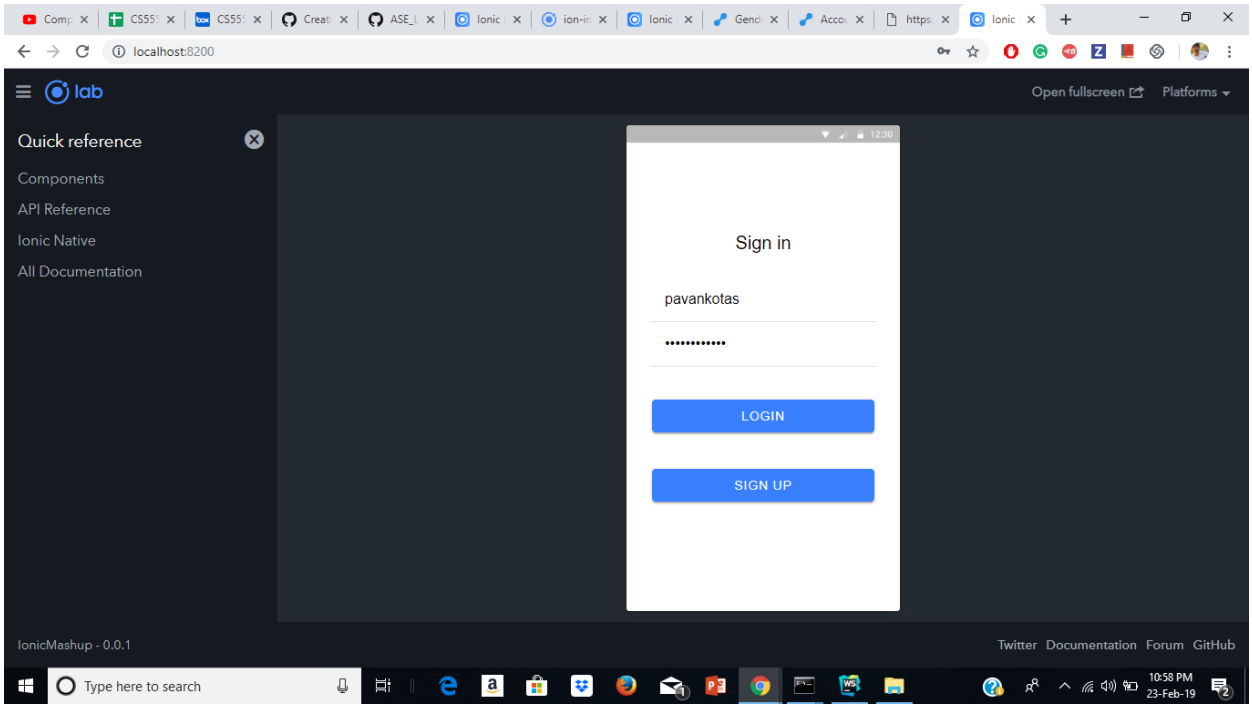
S.no	Test Cases	Type of testcase
1	Verify whether login button is enabled or not when user is trying to login	Positive
2	Our system will verify if button got disabled once user logged in	Positive
3	Verify if a user cannot login with invalid username and valid password.	Negative

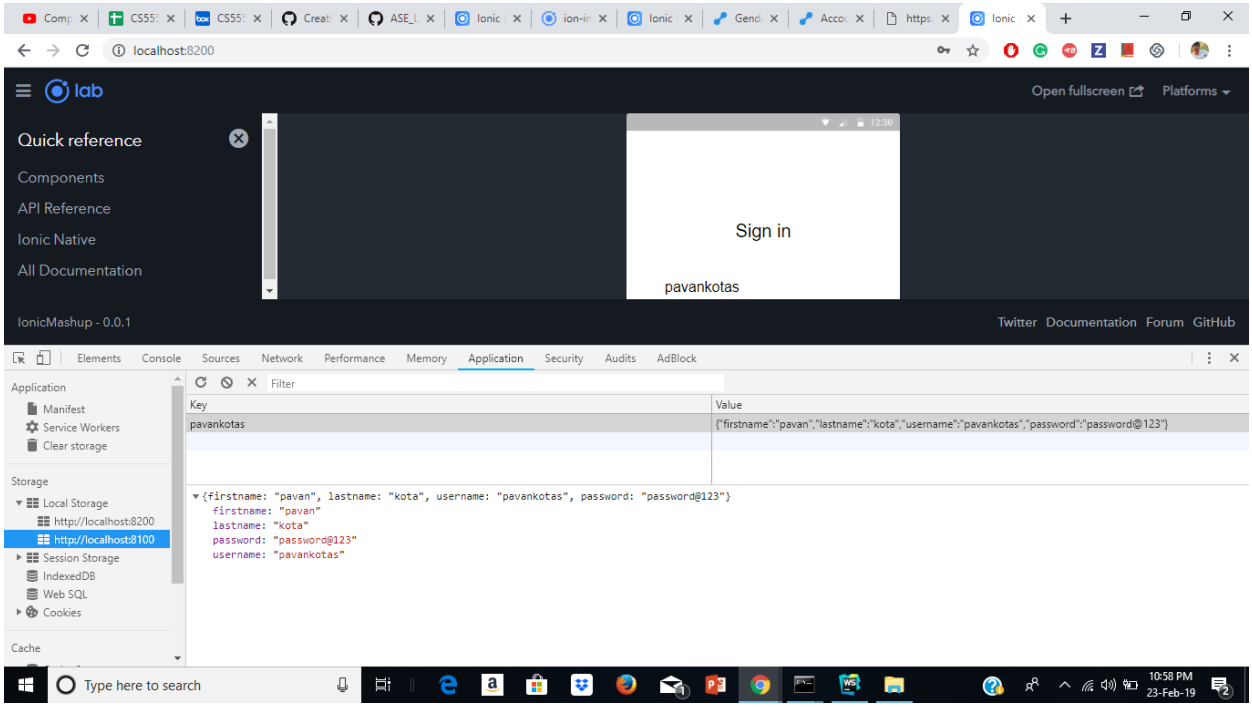
Unit Testing using Karma:

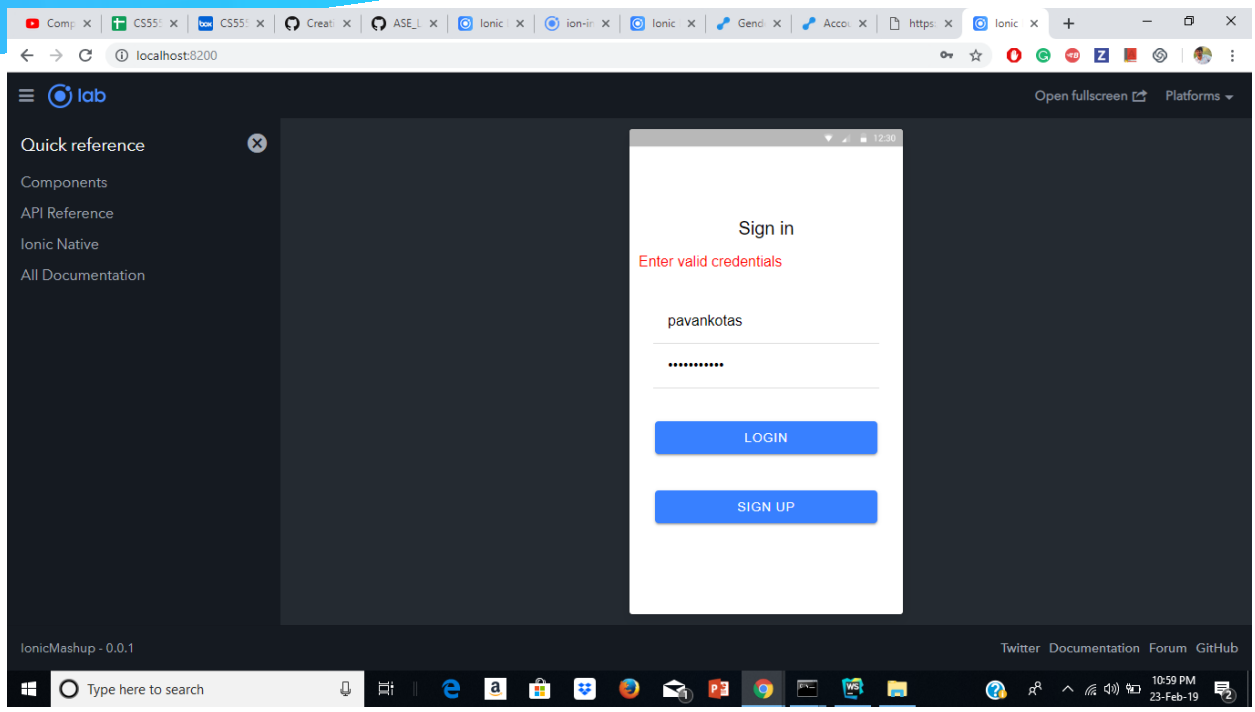
Command used to test ionic application using karma is : ng test



UI Screens (Inputs/Outputs):



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API Reference
Ionic Native
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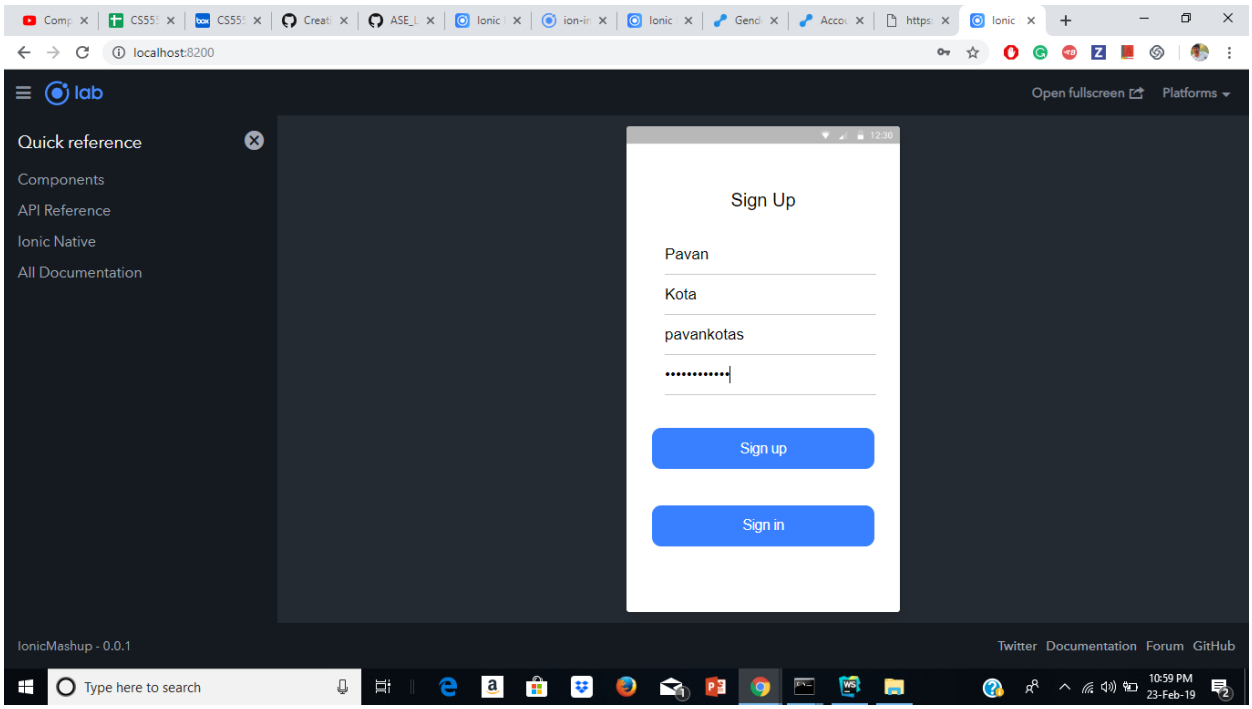
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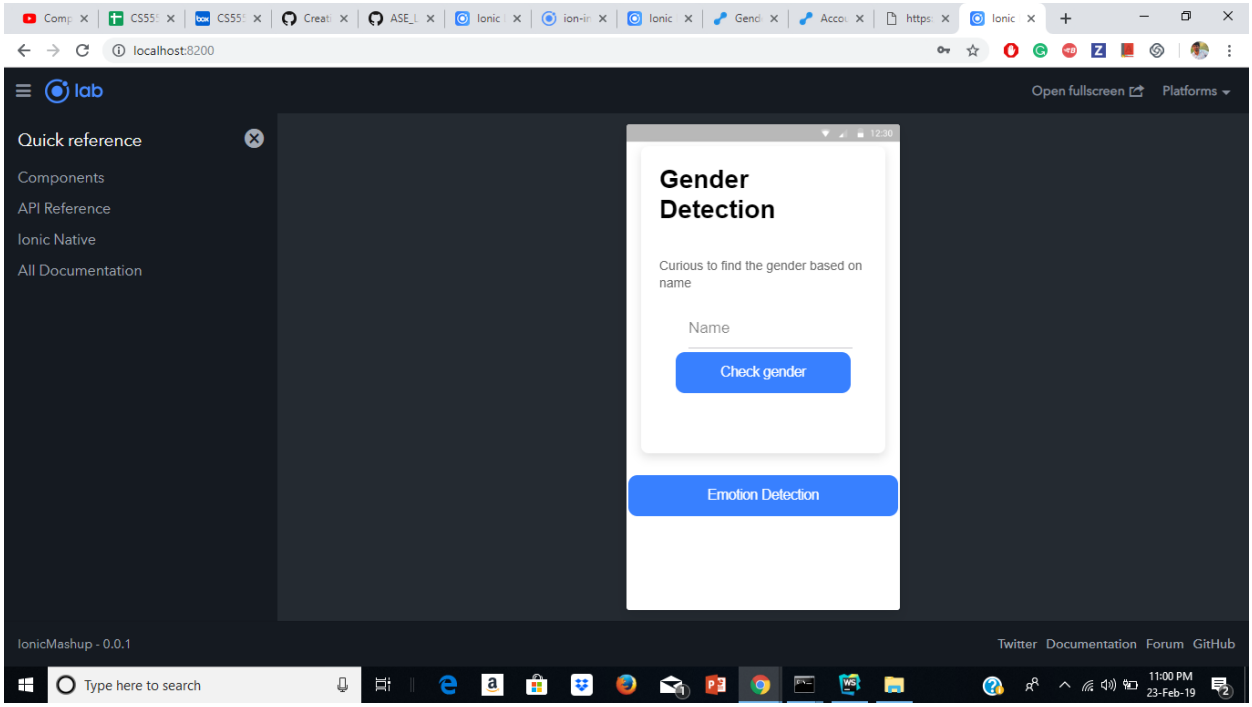
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Quick reference
Components
API Reference
Ionic Native
All Documentation
Gender Detection
Curious to find the gender based on name
Name
Check gender
Emotion Detection
IonicMashup - 0.0.1
Twitter
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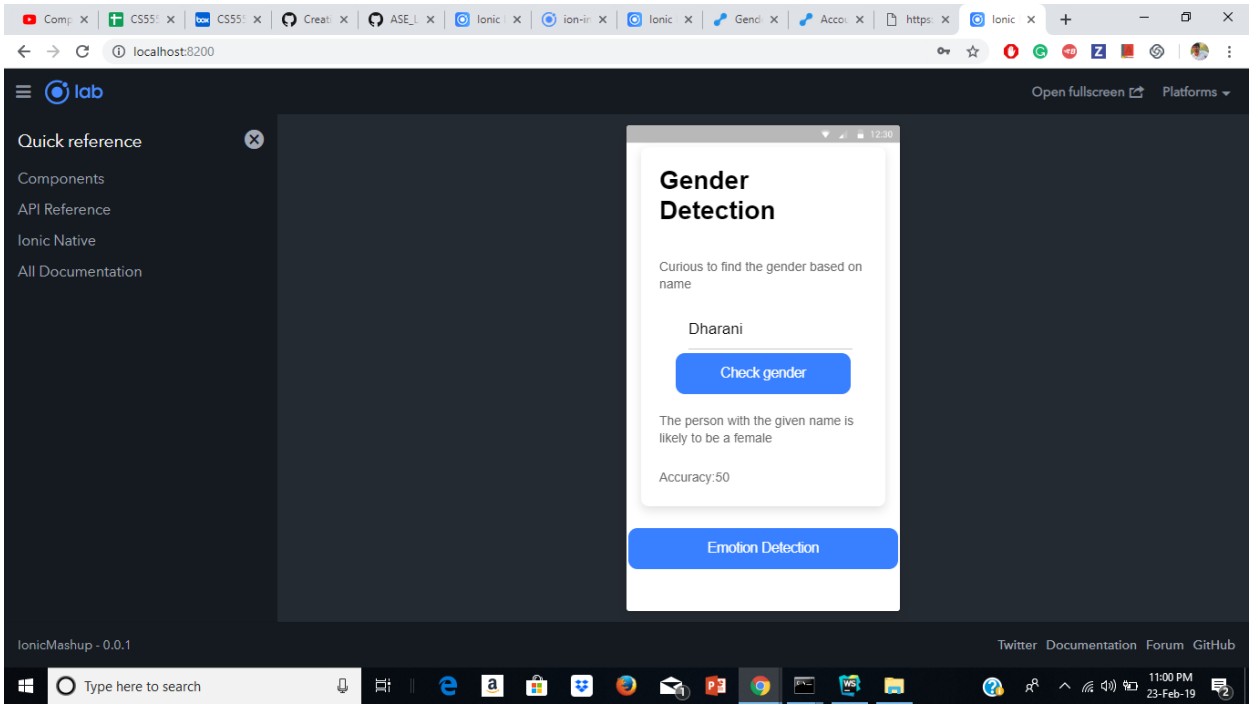
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lab
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Quick reference
Components
API Reference
Ionic Native
All Documentation
Gender Detection
Curious to find the gender based on name
Dharani
Check gender
The person with the given name is likely to be a female
Accuracy:50
Emotion Detection
IonicMashup - 0.0.1
Twitter
Documentation
Forum
GitHub
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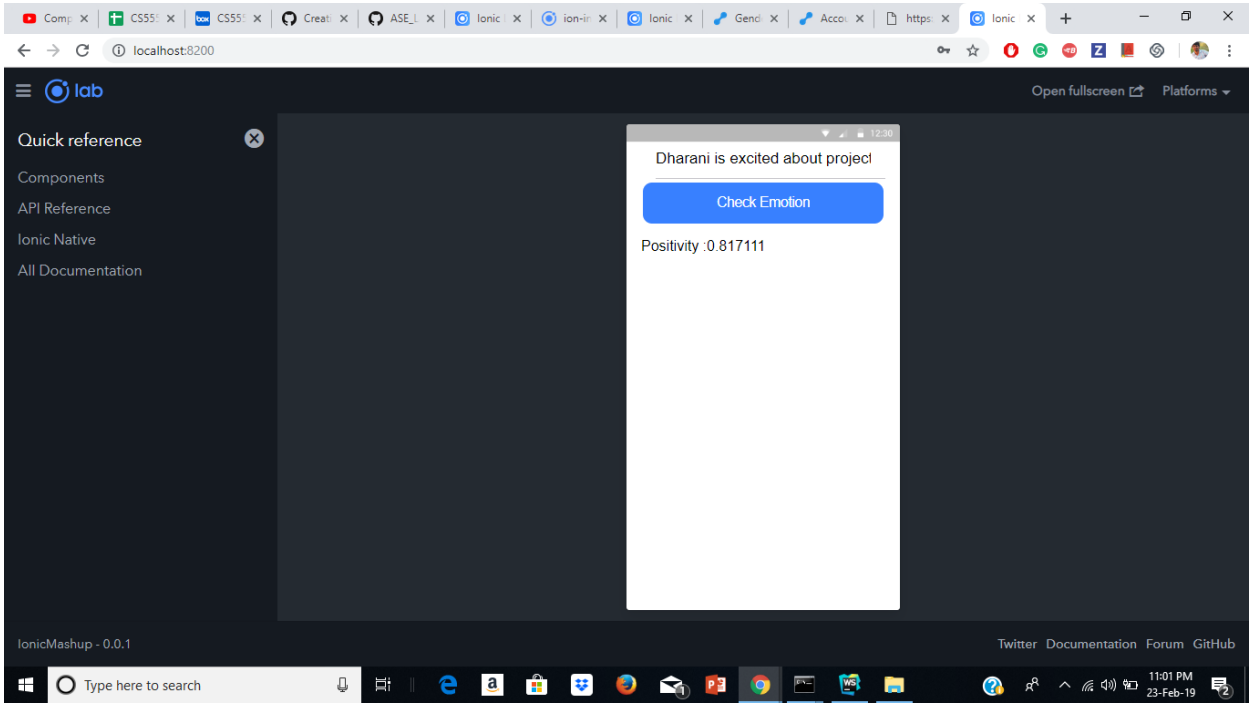

Issues/Limitations:

We have faced few issues with Ionic 4 as that is still in beta phase.

Conclusion:

This Lab assignment helped us gain knowledge on Ionic and build applications on the same which helps to build mobile and web applications using web technologies. Furthermore we have also learn how to write testcases and do unit testing in Karma.