




MAY 6, 2017

# CSCE-590 PROJECT

## WORKFLOW MANAGEMENT

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## Introduction

In this project, I developed application regarding user work flow management using angular 2, a user will be submitting his files and upload it to server. Here I am using nodeJS as the server to store files. I am using mongo DB to store user credentials and the files he has submitted. Using expressJS I generated rest URLs such that user can log in, signup and upload files.

Once a user submits his files, there exists an approver who will verify the files and provide the required comments to the submitted files by the user. I have added support excel files where I face issues while downloading the file. But later achieved it without any errors in the downloaded file.

## Frameworks

- Angular 2
- Mongoose (JavaScript framework for accessing MongoDB)
- Node JS
- Express JS

Angular 2 comes with NPM package so **'npm install -g angular-cli'** is the command that is used to setup an angular2 environment in the system.

To create a new angular 2 project, we use **'ng new project\_name'**

Using **'ng serve'** angular 2 app will be started.

## Angular 2:

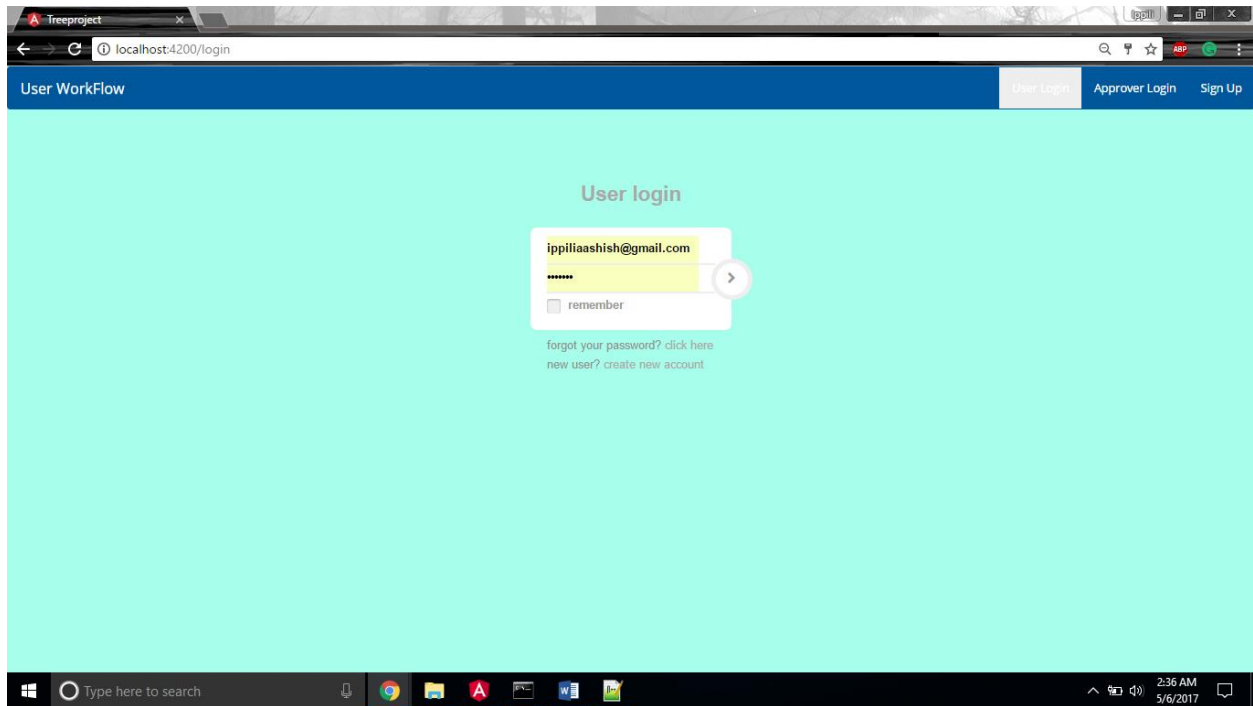
Angular applications are made up of components. A component is the combination of an HTML template and a component class that controls a portion of the screen. Every component begins with an `@Component` decorator function that takes a metadata object. The metadata object describes how the HTML template and component class work together.

```
@Component({  
  selector: 'my-app',  
  template: `<h1>Hello {{name}}</h1>`  
})
```

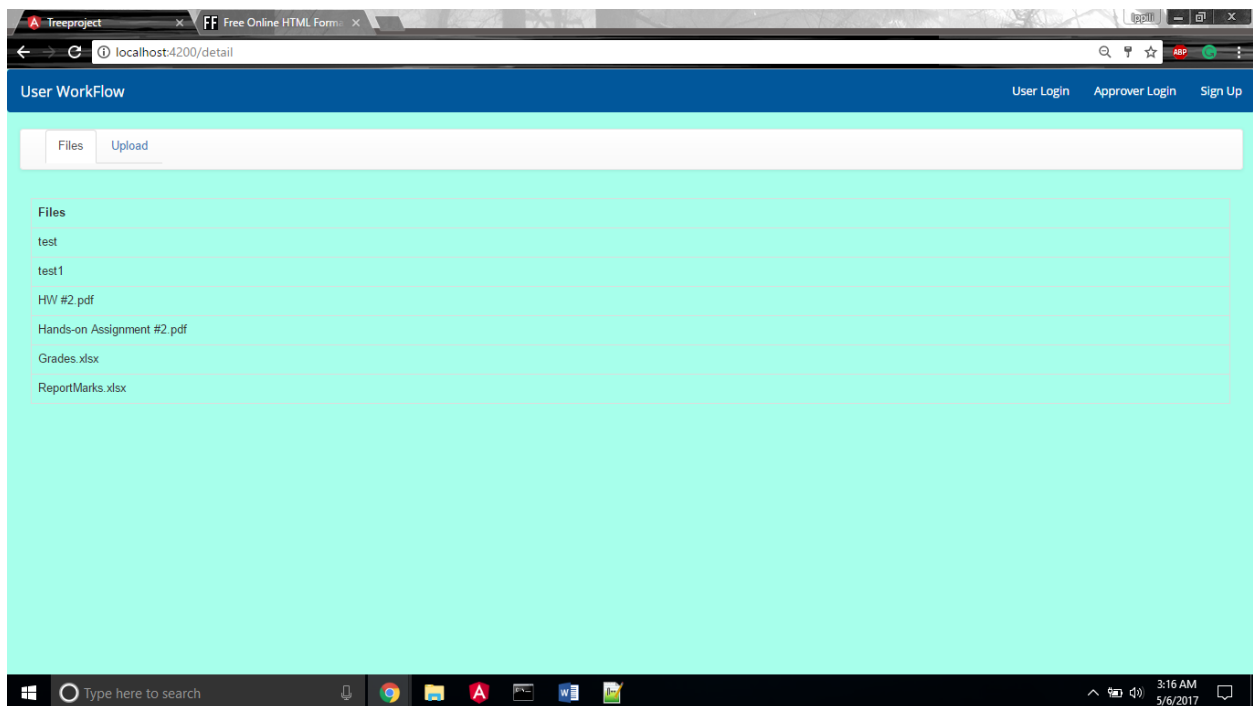
The selector property tells Angular to display the component inside a custom `<my-app>` tag in the index.html.

The template property defines a message inside an `<h1>` header. At runtime, Angular replaces **{{name}}** with the value of the component's name property. Interpolation binding is one of many Angular features you'll discover in this documentation.

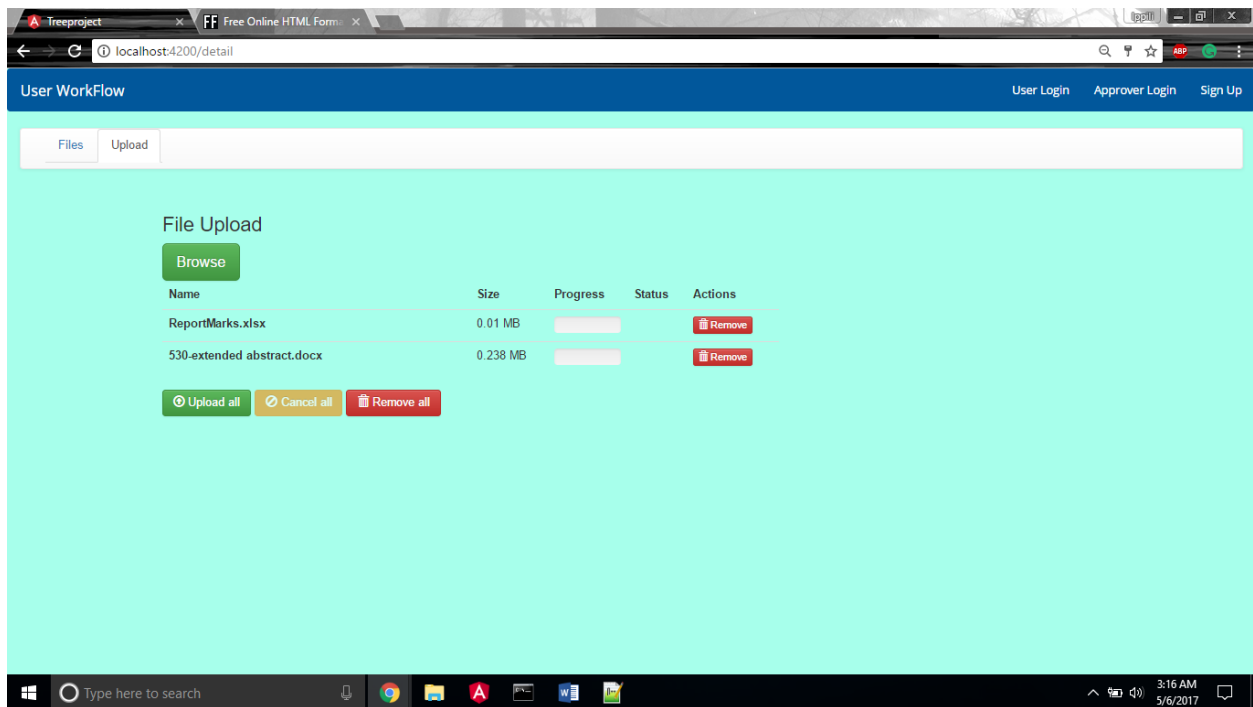
## Screen shots of the application



I have provided screen for user login and approver login two separate screens.

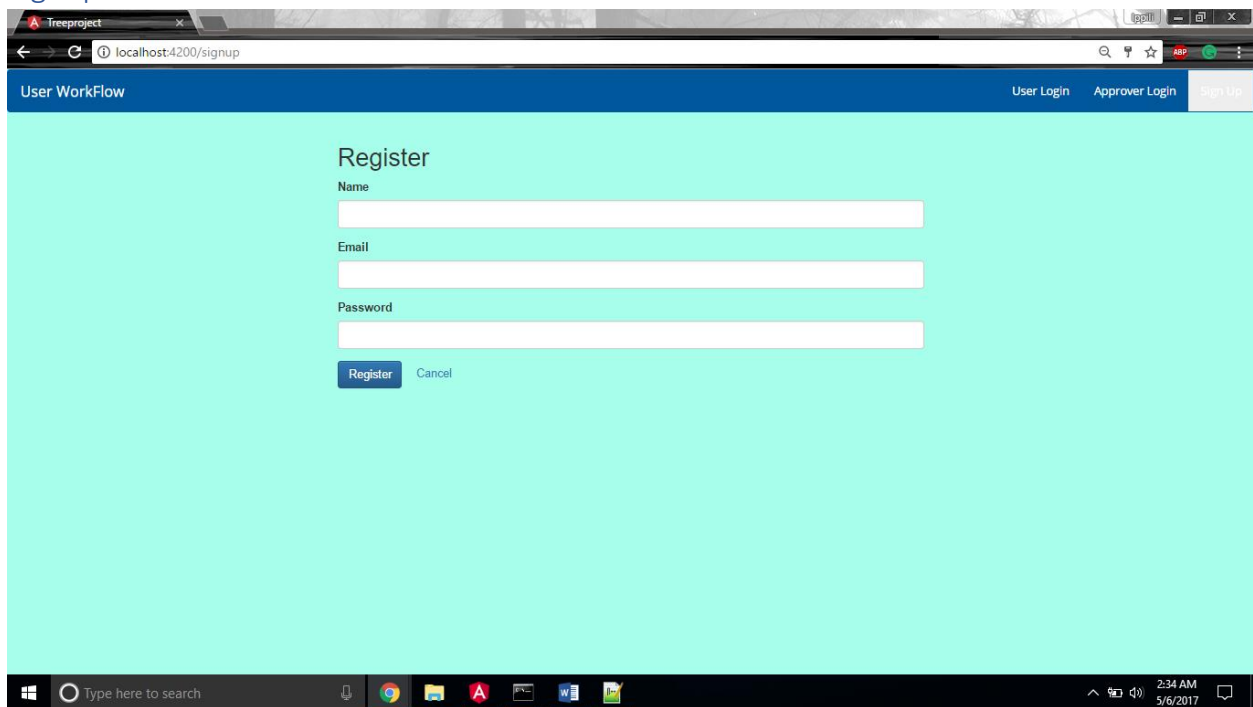


After user logs in he will see the list of files he uploaded

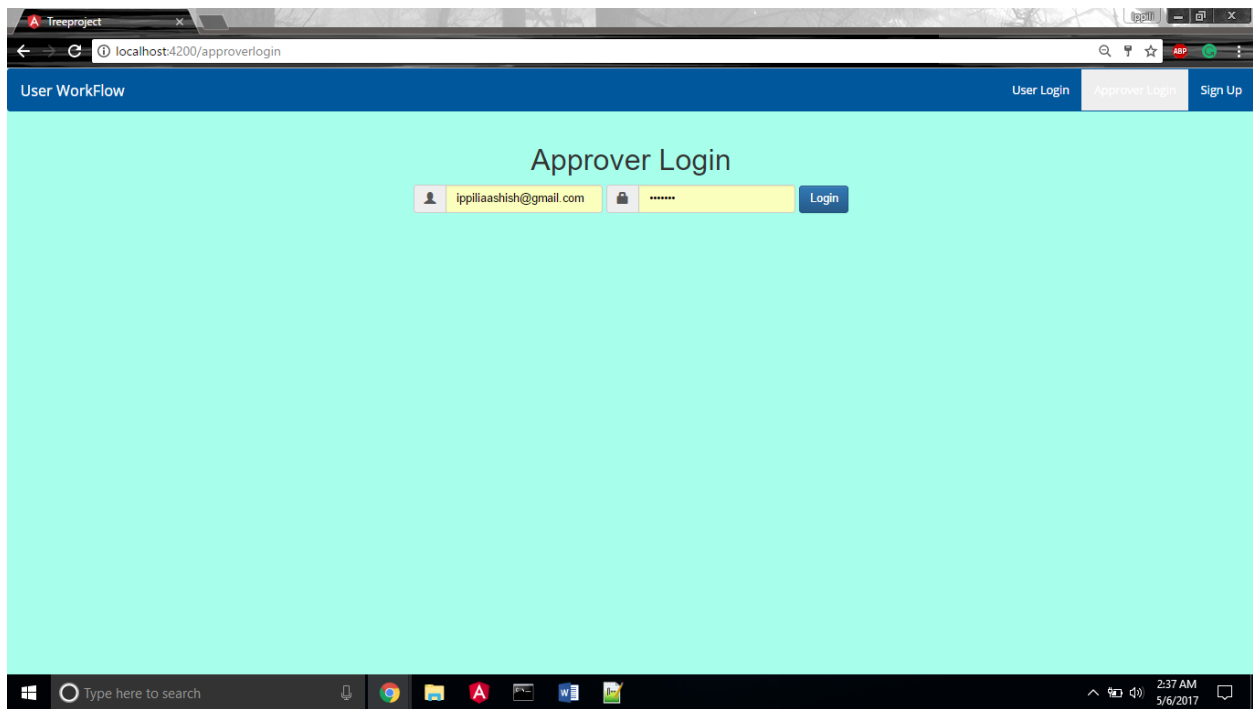


User can upload new files to the server by navigating to upload tab.

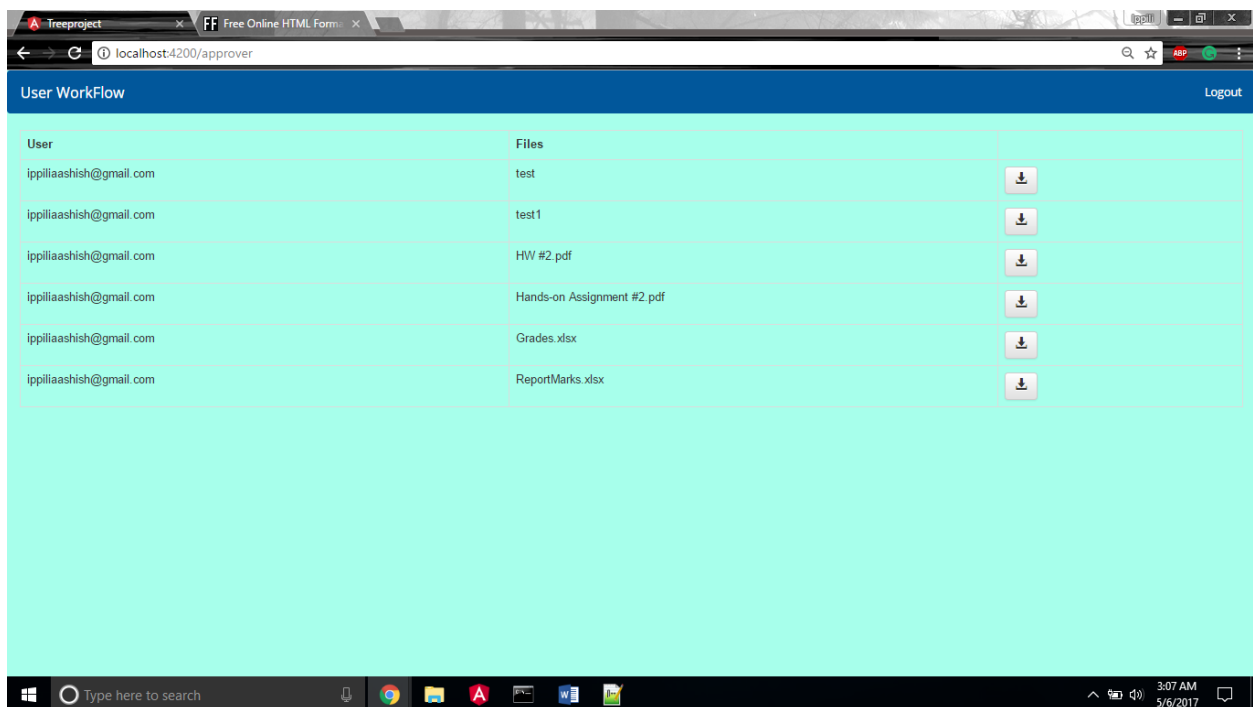
## Signup screen



Signup screen for users we can make one of the users as approvers by changing the attribute value in database.



Log in page for approver once the approver logs in he will see list of files submitted by users



Once the approver logs in he will see the users and the list of files he uploaded.

```

app.post('/login', function(req, res) {
  Team.find({
    'email': req.body.email,
    'password': req.body.password,
    'admin' : req.body.admin
  }, function(err, teams) {
    if (err) {
      onErr(err);
    } else {
      if (teams.length == 0) {
        res.status(500).json({
          err: err
        });
      } else {
        return res.status(200).json(teams);
      }
    }
  });
});

```

Login post API using express js when we passed the required parameters to this and if credentials are equal to the one that in the database user will be logged in. In the similar fashion, I have written rest calls for remaining actions like download, signup, and file upload.

```

login(email: string, password: string, admin: boolean) {
  const headers = new Headers();
  headers.append('Content-Type', 'application/json');
  return this.http.post('http://localhost:3000/login',
    JSON.stringify({email: email, password: password, admin: admin}),
    { headers: headers })
    .map(response => {
      // login successful if there's a jwt token in the response
      let user = response.json();
      if (user) {
        // store user details and jwt token in local storage to keep user logged in between page refreshes
        localStorage.setItem('currentUser', JSON.stringify(user));
      }
    }).catch(this.handleError);
}

```

This is the login method in service component we can use http.post to pass the login credentials and if it succeeds we will navigate to page.

We navigate to any page using router in angular. Each time code is modified angular server which is ng server refreshes the content in the web browser.