### PROJECT REPORT

on

### "E-COURT"

## **Department of Computer Science and Engineering**



Rajiv Gandhi University of KnowledgTechnologies(RGUKT) RK VALLEY

submitted by

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Under the Esteemed guidance of

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RGUKT RK Valley.

### **DECLARATION**

We hereby declare that the report of the B.Tech Major Project Work entitled "E-COURT" which is being submitted to Rajiv Gandhi University of Knowledge Technologies, RK Valley, in partial fulfillment of the requirements for the award of Degree in Bachelor of Technology in Computer Science and Engineering, It is a bonafide report of the work carried out by us. The material contained in this report has not been submitted to any university or institution for award of any degree.

**D.PAVANI - R171131** 

Dept. Of Computer Science and Engineering.



# RAJIV GANDHI UNIVERSITY OF KNOWLEDGE TECHNOLOGIES

(A.P.Government Act 18 of 2008)

RGUKT, RK VALLEY

Department of Computer Science and Engineering

#### CERTIFICATE FOR PROJECT COMPLETION

This is certify that the project entitled "E-COURT" submitted by **D.PAVANI(R171131)**, under our guidance and supervision for the partial fulfillment for the degree Bachelor of Technology in Computer Science and Engineering during the academic semester-2 2022-2023 at RGUKT, RK VALLEY.To the best of my knowledge, the results embodied in this dissertation work have not been submitted to any University or Institute for the award of any degree or diploma.

**Project Internal Guide** 

Mr N.Satyanandaram RGUKT, RK Valley **Head Of The Department** 

N.Satyanandaram RGUKT, RK Valley

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### **ABSTRACT**

E-Court case detail system is an online platform designed for lawyers and judges effeciently to manage the case details and reduce paper-based records. This system will enable advocates to have easy access to case details ,court proceeding records and case history . The main aim of the E-COURT project is to store the cases that are filed in the court and to maintain the records of that cases and generate PDF of cases. This project helps to keep tracking of the cases that are filed and the status of the cases. The e-court project provides effecient and time bound, transparent, affordable case details. It gives access to the case status information. This project is designed by using HTML, CSS, Angular JS as Front-end and the database is connected to the google firebase. The Google Firebase Realtime Databse is a cloud-hosted NoSQL database that lets you store and sync the between your users in realtime. Cloud Firestore anables you to store, sync and query app data at global scope.

The Advocate store the case details, case status, Petitioner and advocate that are consulted, the acts and the history of case hearing, objections and additional information about the cases and all these information is stored in the google cloud firebase, whenever the advocate want the case details he can go to the firebase and search for the case details accordance to case type or registration name and etc, he can also use filter operation by name filter or date filter to get the case details in order.

### 2.INTRODUCTION

E-COURT is a web-based application handled by the single client and has form groups which is used to store the data and the form arrays that are used to store the repeated groups and we can modify the data in it whenever we want. The project was developed by using HTML,CSS and angular JS and it have onle one module i.e.,

Admin/User

#### Admin/User Module:

**Login:** Users will be able to log in to the system using their credentials. Create and manage case details: Users will be able to create and manage case details, including case number, case title, parties involved, and case status.

**Dashboard:** It contains all the statistics that are included in the storing of case details.

court proceedings records: Users will be able to upload court proceedings records, including hearing dates, court orders, and other relevant documents.

*View case history:* Users will be able to view the case history, including previous case details and proceedings records.

**Notifications:** Users will receive notifications on the system when a new case is assigned them or when there is a new update on an existing case.

**Reporting:** The system will generate reports on case details court proceedings.

### **SCOPE:**

E-Court case details system is designed to provide an online platform where users can access case-related information. The system will allow lawyers and judges to:

- Create and manage case details
- Upload court proceedings records
- View case history

- Send notifications to users
- Access the system from any location
- Ensure data security and privacy

#### 2.2.Purpose:

E-Court case details system is an online platform designed for lawyers and judges to efficiently manage the case details and reduce paper-based records. The system will enable judges and lawyers to have easy access to case details, court proceedings records, and case history. The system will provide a secure and reliable environment for users to manage their case details seamlessly.

#### 2.3. Product Vision:

#### **Vision Statement:**

The traditional court system is a time and paper-intensive process. All case details and records are maintained in files and documents, making it difficult for lawyers and judges to manage cases efficiently. The traditional process is not only difficult but also prone to errors, delays, and information loss. The electronic system will provide a better alternative to the traditional system. To overcome this problem we have been introduced the E-Court project that the case details are stored and used effeciently.

### **3.TECHNOLOGIES**

- HTML
- CSS
- Angular JS
- Firebase

#### HTML:

The HyperText Markup Language or HTML is the standard markup language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets and scripting languages

#### CSS:

Cascading Style Sheets is a style sheet language used for describing the presentation of a document written in a markup language such as HTML or XML. CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript.

### **Angular JS:**

Angular JS is a structural framework for dynamic web apps. It lets you use HTML as your template language and lets you extend HTML's syntax to express your application's components clearly and succinctly. Angular JS's data binding and dependency injection eliminate much of the code you would otherwise have to write.

Angular JS lets you extend HTML vocabulary for your application. The resulting environment is extraordinarily expressive, readable, and quick to develop . Angular JS is a tool set for building the framework most suited to your application development. It is fully extensible and works well with other libraries. Every feature can be modified or replaced to suit your unique development workflow and feature needs.

#### **Google Firebase:**

Google Analytics for Firebase lets you export your mobile app data (iOS and Android) to BigQuery and, by matching on UserID, gives you a complete picture of app engagement across channels and devices.

### **4 SYSTEM REQUIREMENT SPECIFICATION**

#### 4.1 NON FUNCTIONAL REQUIREMENTS

#### **4.1.1 SOFTWARE REQUIREMENTS**

This web site requires the following software in Server, clients.

#### **Server-side Requirements:**

Server Operating System Ubuntu Linux, Microsoft Windows Hosting: Google cloud Web Server: Firebase

#### **Client side Requirements:**

All devices compatable.

#### **4.1.2 HARDWARE REQUIREMENTS:**

No hardware needed.

### **4.2 FUNCTIONAL REQUIREMENTS**

#### **4.2.1 PRODUCT REQUIREMENTS**

This website is an online tour management system that provides the following features.

#### Admin:

#### Login with Google or OTP:

In this module the admin first have to log in to the firebase by using log in credentials or by gmail or using OTP.

#### Add Case:

Here the admin have to fill all the credentials that have included in this page like case Type and case filing number, CNR number and Registration number.

#### Case details:

These module contains all the case details like Case filing data and Registration number and Registration date, case Type, Case filing number, and CNR number.

#### Case status:

Case status keeps tracking of case deatils.it includes the case First hearing date, Next hearing date, stage of case, location of the case filing like state and district of the case filing. It contains the petetioner and the respondant and also the advocate deatils that have been assigned.

#### Acts and History of Case Hearing:

In this module it contains the acts that have been included in the case and also includes the history of the case hearing.

#### Case list:

It conatins the list of cases that have been listed in accoradnce to month amd the year.

#### **View Case Details:**

In this module it conatins the view module which will siaplay the case details.it contains all the case details.

#### Generate pdf:

This module is used to generate the pdf format of the case details. By using the MPDF Library and Adobe the pdf is generated.

#### Search:

This search module uses to find the specific case details, search can be anything accordance to case details.

#### Filter:

Filter module is used to display the specific case details by applying filter operation.

#### **4.2.2 PERFORMANCE REQUIREMENTS**

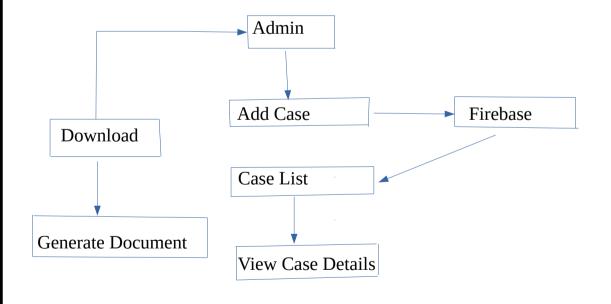
The following performance requirements should be maintained in the project.

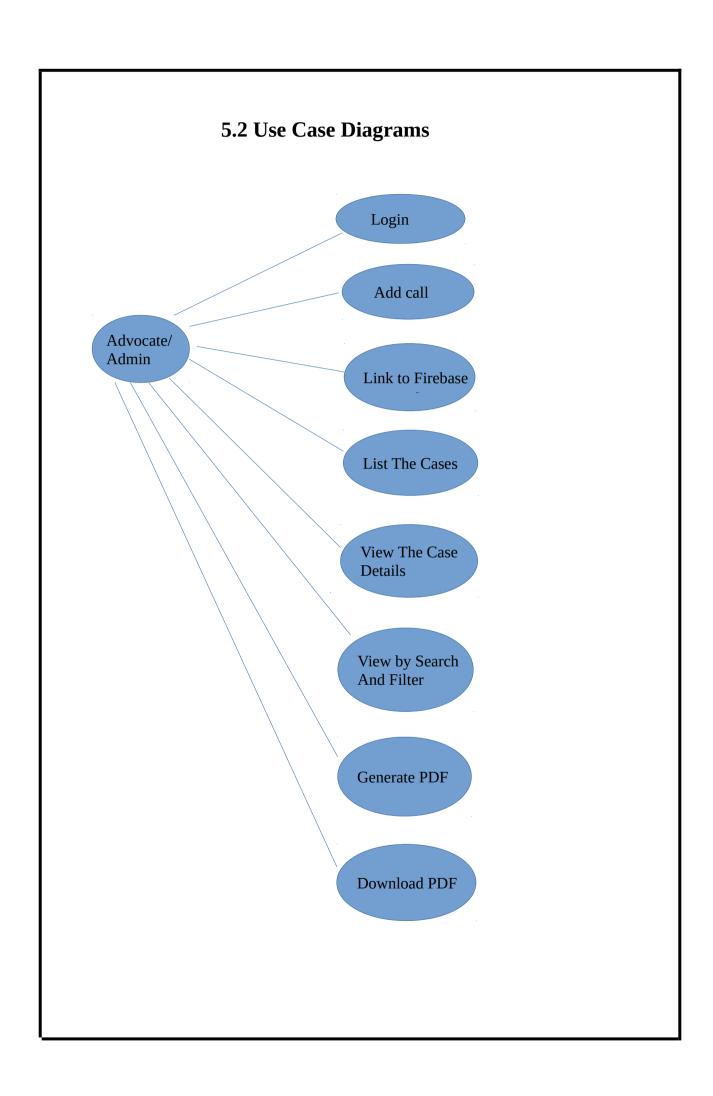
- Each page in the site needs to load in a reasonable amount of time.
- Latest web techniques like Caching should be implemented to speed up the loading of dynamic pages. This will also improve the access facility as connections are freed faster.
- Every module should be accessed within the responsive time and it should be maintained properly.
- The advocate should access the pages according to case details that he have been required.
- The data should be stored precisely and effeciently so that the no third party systems are able to access the data.
- The new updates should be automatically stored in the google firebase and it should provide the access to the data to advocate within the required responsive time.
- The google firebase should be automatically update to the new technologies that will increase or add up the new features which will improve the effeciency of data.
- The loading time of the dynamic pages should be effeciently increased.

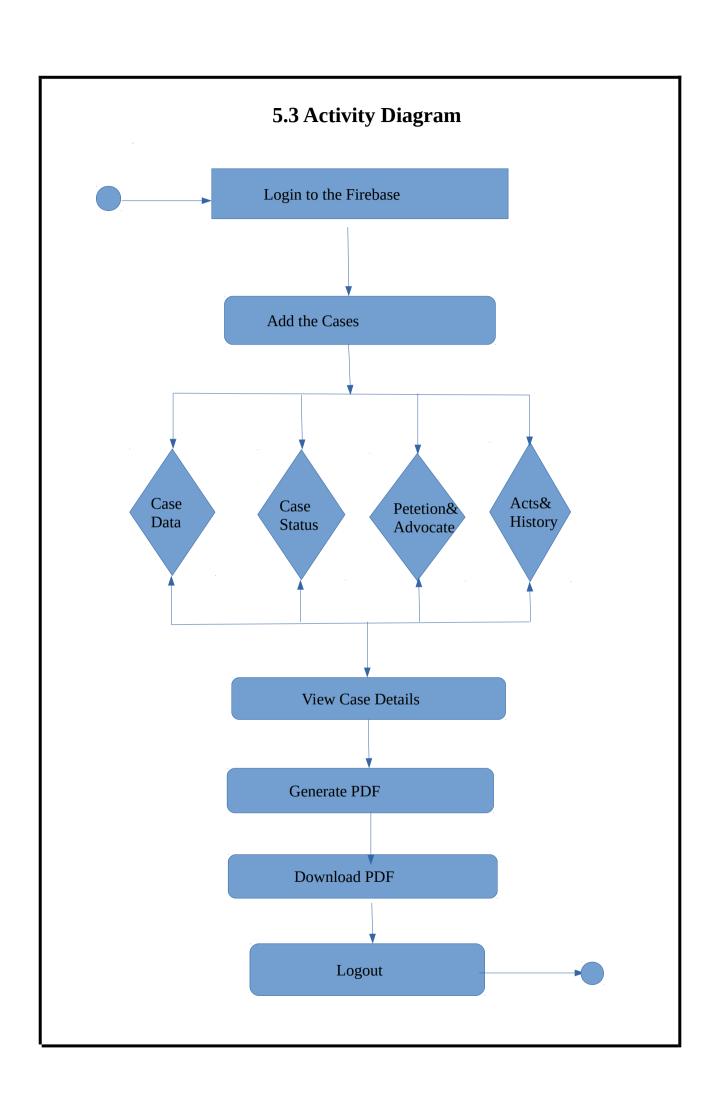
### **5.System Design**

The E-COURT case details management system helps the advocates to reduce the paper work and store the case details according to the case type, case registration number, CNR number and so on. This means the advocate can access the case details at any cost by using serach and filter operation that are provided by the Angular JS.

### **5.1.Context Diagrams**



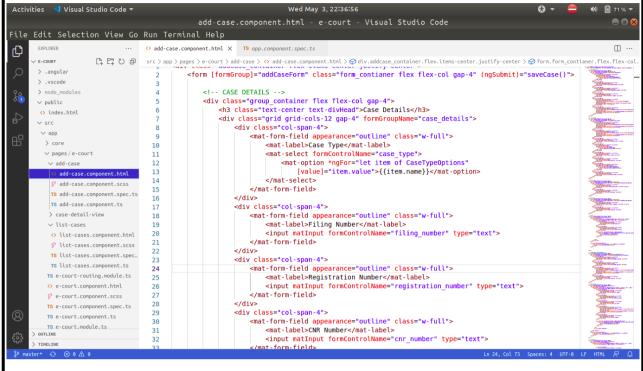




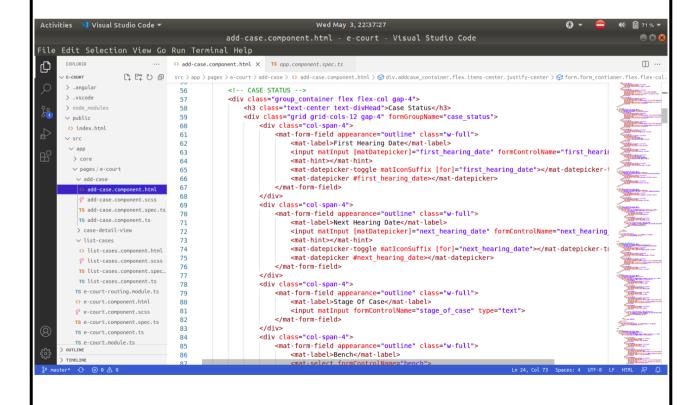
#### 6.CODING

### 6.1-HTML Pages:

#### 6.1.1:CASE DETAILS:

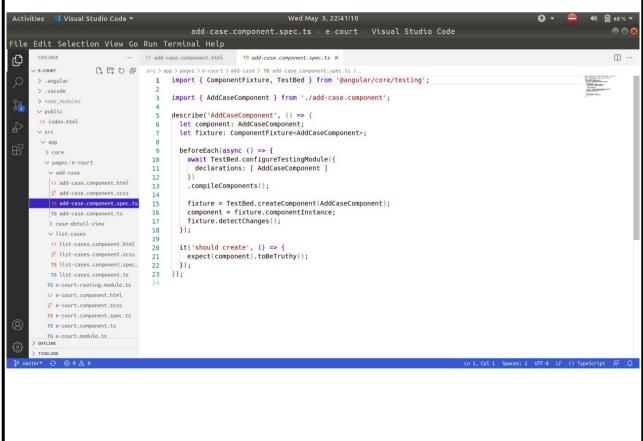


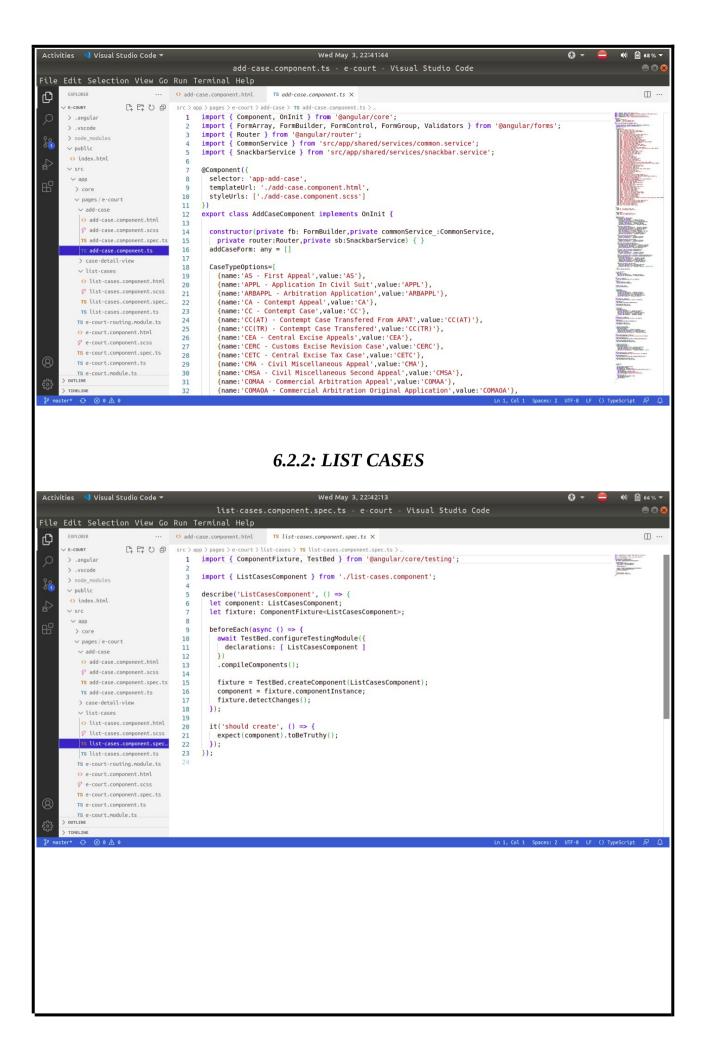
#### 6.1.2:CASE STATUS

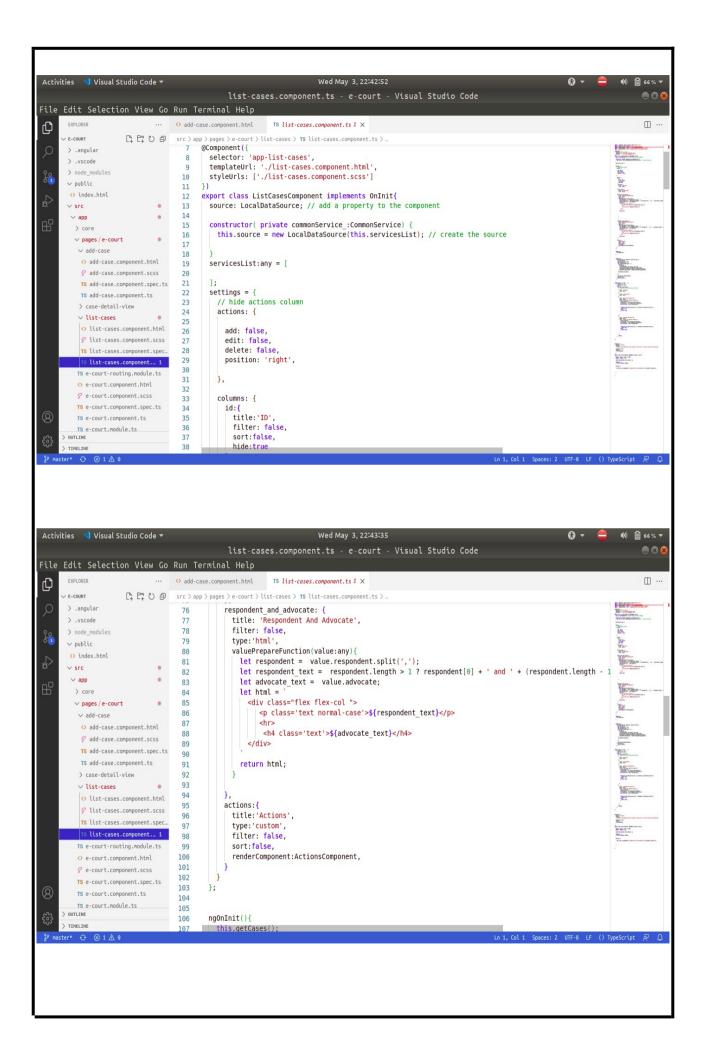


#### 6.1.3: RESPONDANT AND ADVOCATE Activities 🔰 Visual Studio Code 🤻 add-case.component.html - e-court - Visual Studio Code -File Edit Selection View Go Run Terminal Help O EXPLORER () add-case.component.html X TS app.component.spec.ts П ... 日日で日 src > app > pages > e-court > add-case > 🕠 add-case.component.html > 🤡 div.addcase\_container.flex.items-center.justify-center > 😭 form.form\_contianer.flex.flex-col 122 > .angular <!-- P & A --> 123 > .vscode <div class="group\_container flex flex-col gap-4"> > node\_modules <h3 class="text-center text-divHead">Petitioner & Advocate</h3> 125 ∨ public <div class="grid grid-cols-12 gap-4 items-center" formGroupName="petitioner\_and\_advocate"> 126 Tables. O index.html 127 <div class="col-span-6"> <mat-form-field appearance="outline" class="w-full"> ∨ src 128 <mat-label>Petitioner</mat-label> ∨ app <textarea matInput formControlName="petitioner" type="text"></textarea> 130 > core </mat-form-field> 131 ∨ pages / e-court </div> ∨ add-case <div class="col-span-6"> 133 add-case.component.html <mat-form-field appearance="outline" class="w-full"> add-case.component.scs 135 <mat-label>Advocate</mat-label> <input matInput formControlName="advocate" type="text"> 136 TS add-case.component.spec.ts </mat-form-field> TS add-case.component.ts </div> 138 > case-detail-view </div> 139 ∨ list-cases 140 </div> O list-cases.component.html 141 @ list-cases.component.scss <!-- R & A --> <div class="group container flex flex-col gap-4"> TS list-cases.component.spec... 143 <h3 class="text-center text-divHead">Respondent & Advocate</h3> TS list-cases.component.ts 145 TS e-court-routing.module.ts 146 O e-court component html <mat-form-field appearance="outline" class="w-full"> e-court.component.scss <mat-label>Respondent</mat-label> 148 TS e-court.component.spec.ts <textarea matInput formControlName="respondent" type="text"></textarea> 149 TS e-court.component.ts 150 </mat-form-field> </div> TS e-court module ts 151 <div class="col-span-6"> 153 <mat-form-field appearance="outline" class="w-full"> 6.1.4: ACTS Activities 🤘 Visual Studio Code 🔻 Wed May 3, 22:38:44 add-case.component.html - e-court - Visual Studio Code File Edit Selection View Go Run Terminal Help EXPLORER o add-case.component.html X TS app.component.spec.ts П .. D 0 E U E src > app > pages > e-court > add-case > O add-case.component.html > @ div.addcase\_container.flex.items-center.justify-center > @ form.form\_contianer.flex.flex-col V E-COURT > .angular TANKS. <!-- ACTS --> 161 <div class="group\_container flex flex-col gap-4"> 162 <h3 class="text-center text-divHead">Acts</h3> > node module 164 <div formArrayName="acts"> ∨ public <ng-container \*ngFor="let a of addCaseForm.get('acts').controls: let i = index"> 165 index.html <div class="grid grid-cols-12 gap-4 relative mb-3" [formGroupName]="i"> 166 V SEC <div class="col-span-6"> V ann <mat-form-field appearance="outline" class="w-full"> 168 > core <mat-label>Under Acts</mat-label> 169 <input matInput formControlName="under\_acts"> ∨ pages / e-court </mat-form-field> 172 </div> <div class="col-span-6"> 173 add-case.component.scss <mat-form-field appearance="outline" class="w-full"> TS add-case component specits 175 <mat-label>Under Sections</mat-label> TS add-case.component.ts 176 <input matInput formControlName="under sections"> > case-detail-view 177 </mat-form-field> </div> ∨ list-cases O list-cases.component.html 180 ♀ list-cases.component.scss (click)="removeActs(i)" type="button"> 181 TS list-cases component spec <mat-icon color="warn">delete</mat-icon> TS list-cases.component.ts 183 </hutton> </div> 184 O e-court.component.html 185 @ e-court.component.scss 187 </div> TS e-court.component.spec.ts </ng-container> 188 (Q) TS e-court component ts TS e-court.module.ts 190 <div class="flex justify-center"> 191 <button mat-mini-fab color="primary" (click)="addActs()" type="butto"</pre>

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#### 6.2.3: ACTS

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import { RouterTestingModule } from '@angular/router/testing';
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          describe('AppComponent', () => {
  beforeEach(async () => {
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          TS add-case.component.ts
                                                await TestBed.configureTestingModule({
          > case-detail-view
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          TS list-cases.component.ts
                                               }).compileComponents();
         TS e-court-routing.module.ts
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                                             it('should create the app', () => {

    e-court.component.scss

                                      17
                                               const fixture = TestBed.createComponent(AppComponent);
const app = fixture.componentInstance;
         TS e-court.component.spec.ts
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         TS e-court.component.ts
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                                                expect(app).toBeTruthy();
         TS e-court.module.ts
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         > shared
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        TS app-routing.module.ts
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                                              it(`should have as title 'e-court'`, () => {
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        app.component.html
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                                      25
                                                const app = fixture.componentInstance;
         @ app.component.scss
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                                                expect(app.title).toEqual('e-court');
                                             });
                                      28
        TS app.module.ts
                                              it('should render title', () => {
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        > assets
                                                const fixture = TestBed.createComponent(AppComponent);
                                                fixture.detectChanges();
      > OUTLINE
                                      31
                                                const compiled = fixture.nativeElement as HTMLElement;
```

### 7 Testing

After all phase have been perfectly done, the system will be implemented to the server and the system can be used.

#### **System Testing**

The goal of the system testing process was to determine all faults in our project. The program was subjected to a set of test inputs and many explanations were made and based on these explanations it will be decided whether the program behaves as expected or not. Our Project went through two levels of testing

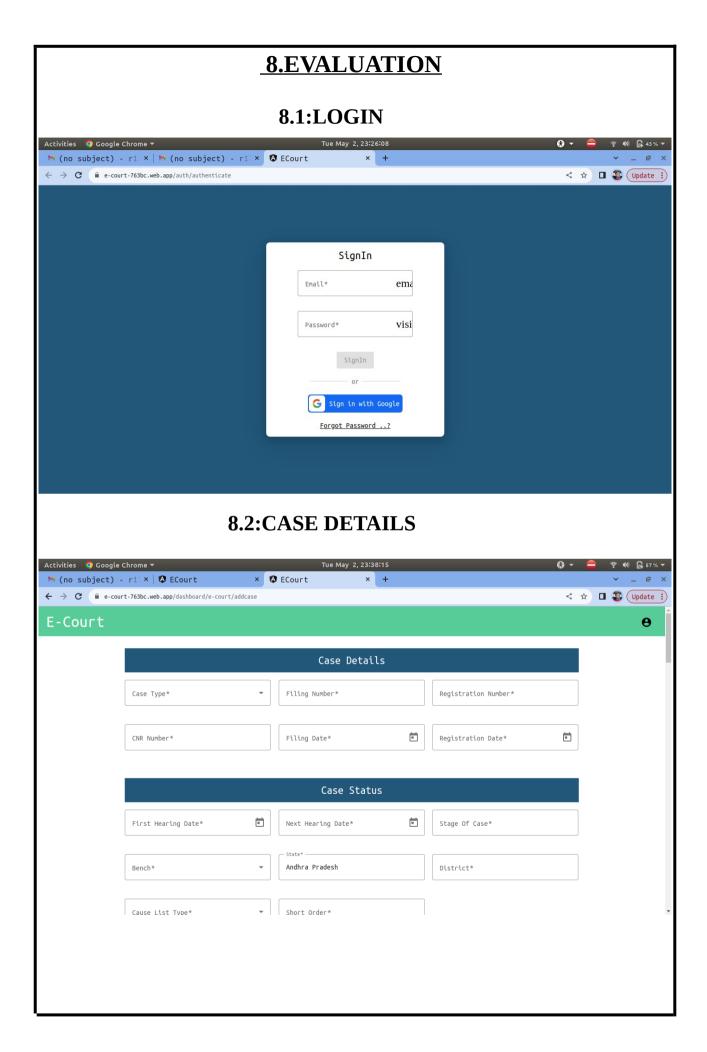
- 1. Unit testing
- 2 .Integration testing

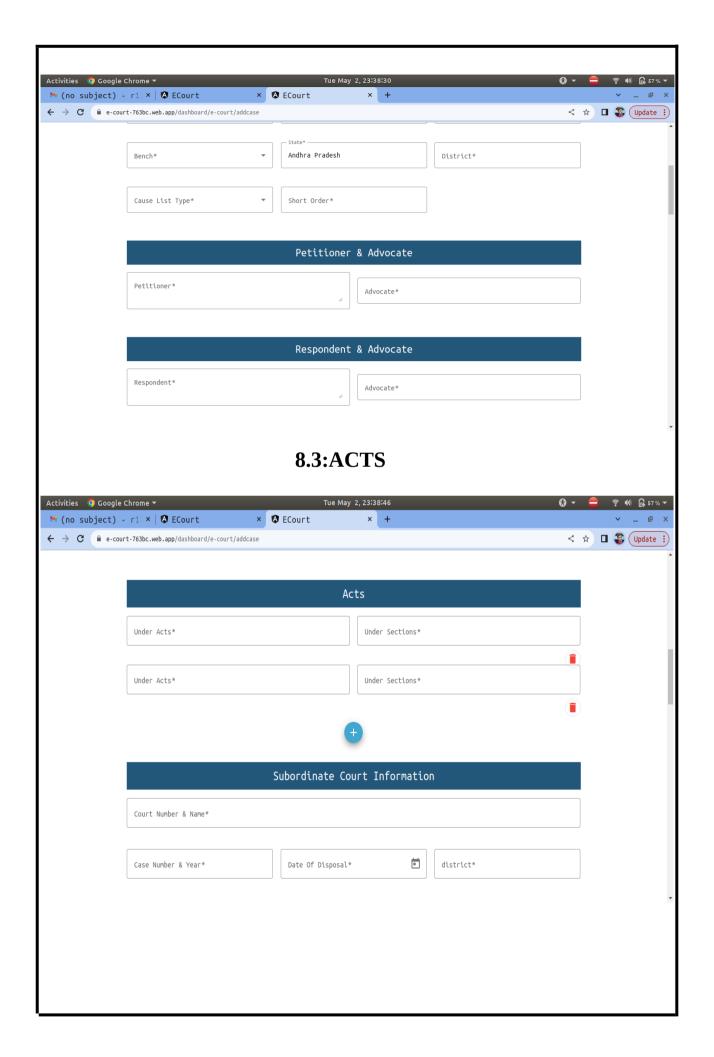
### **Unit Testing**

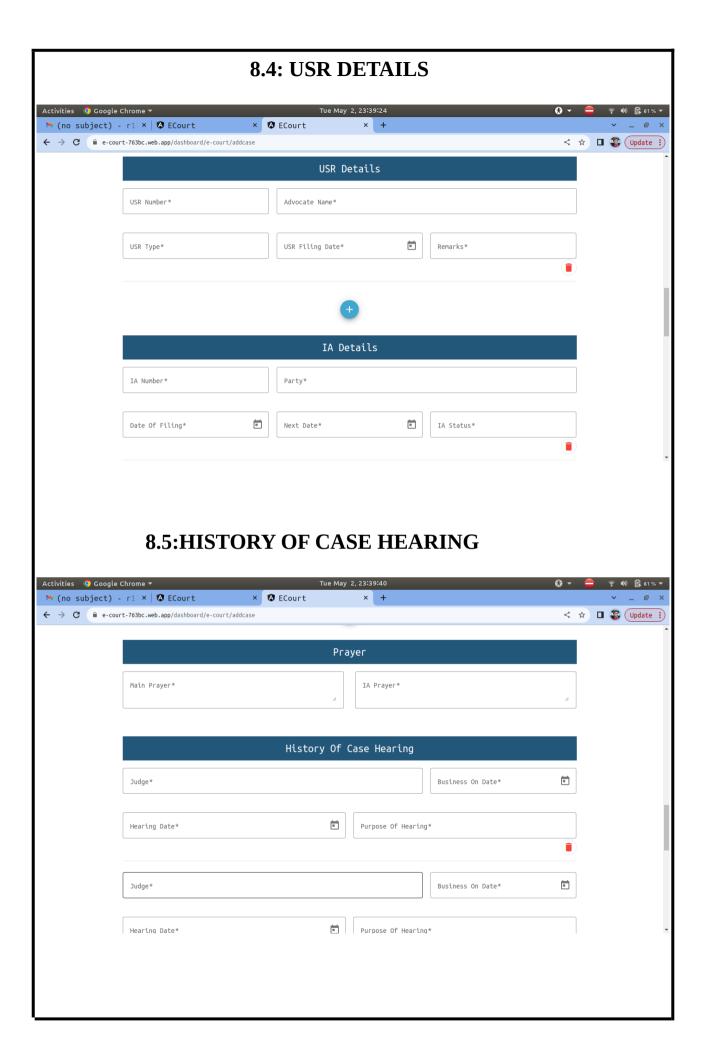
Unit testing is commenced when a unit has been created and effectively reviewed .In order to test a single module we need to provide a complete environment i.e. besides the section we would require The procedures belonging to other units that the unit under test calls Non local data structures that module accesses .A procedure to call the functions of the unit under test with appropriate parameters

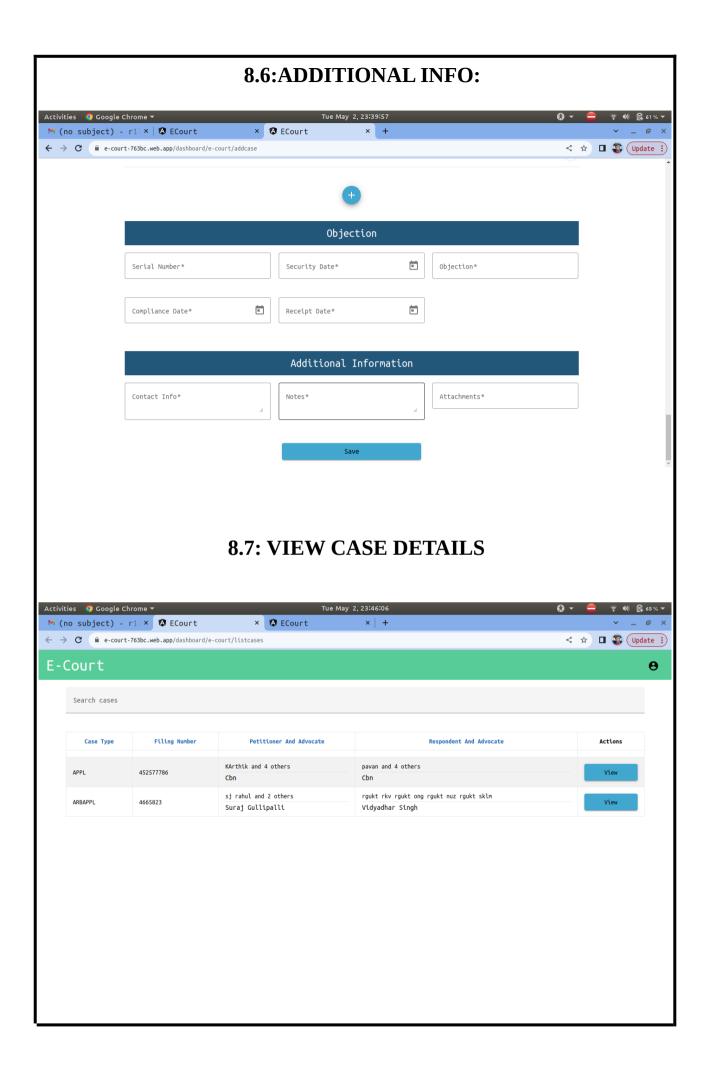
### **Integration Testing**

In the Integration testing we test various combination of the project module by providing the input. The primary objective is to test the module interfaces in order to confirm that no errors areoccurring when one module invokes the other module.



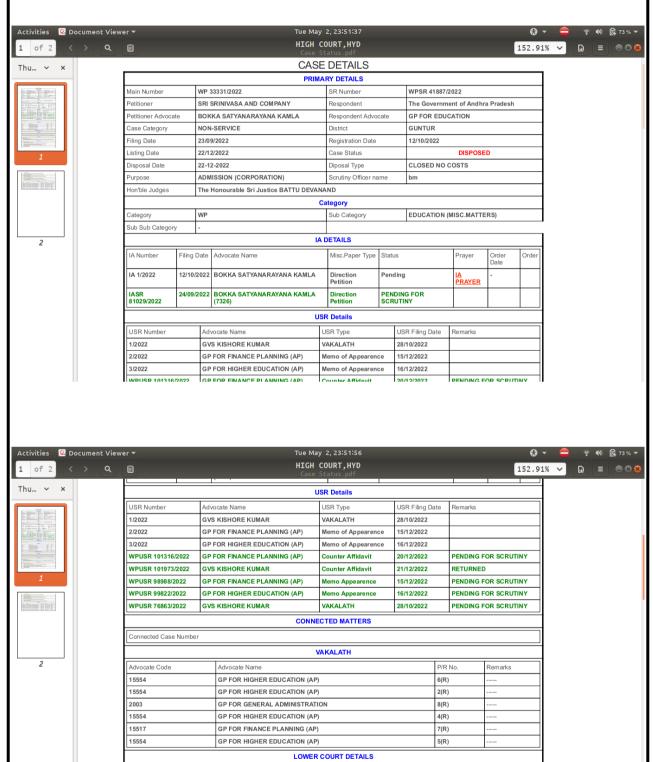




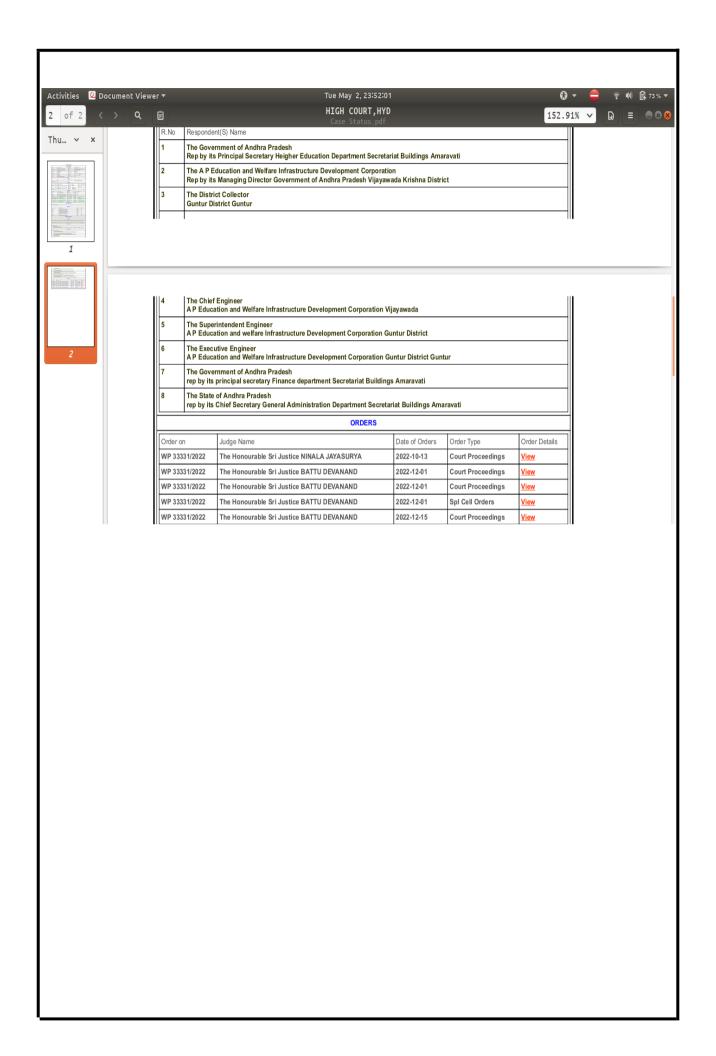


### 9.FINAL OUTPUT

#### 9.1:PDF GENERATOR



pleased to issue a Writ Order or direction more particularly one in the nature of Writ of Mandamus to declaring the inaction on the part of the respondents herein not releasing and part bill amount total worth an amount of Rs 51 13 727 as per the pay order dated 21 04 2022 in view of CFMS under execution and construction of Government BC Colleae Girls Hostel Building No I at Railuari Thota in Guntur District to the



### **10.CONCLUSION**

E-Court case details system will improve the efficiency of the court system and reduce unnecessary paperwork. The system will provide a user-friendly interface that will make it easier for lawyers and judges to manage cases. The system will ensure that the information is secure and accessible at any time. Developing an electronic system for court proceedings will help in saving time, money and will also make the whole court process much more organized and transparent.

### **11.REFERENCES**

- 1. <a href="https://material.angular.io/components/categories">https://material.angular.io/components/categories</a>
- 2. https://www.w3schools.com/php
- 3. https://www.w3.org/Style/CSS/Overview.en.html
- 4. <a href="https://www.w3schools.com/js/js\_functions.asp">https://www.w3schools.com/js/js\_functions.asp</a>