**Chapter 5**

**Testing**

5.1 Manual Testing

5.1.1 Unit testing

* Login

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Test case | Description | Test step | Test data | Expected result | Actual result | Status |
| 1 | Login with valid credentials | * Enter valid email and password in login form. * Click to login button | Email:  [test@gmail.com](mailto:test@gmail.com)  password:  12345@ | User successfully logged in | User successfully logged in | Pass |
| 2 | Login with invalid Email Field | * Enter invalid email and valid password in login form. * Click to login button | Email:  [test1@gmail.com](mailto:test1@gmail.com)  password:  12345@ | Error message | Error message | pass |
| 3 | Login with invalid password Field | * Enter valid email and invalid password in login form. * Click to login button | Email:  [test@gmail.com](mailto:test@gmail.com)  password:  12345 | Error message | Error message | pass |
| 4 | Login with invalid credentials | * Enter invalid email and password in login form. * Click to login button | Email:  [test1@gmail.com](mailto:test1@gmail.com)  password:  12345 | Error message | Error message | pass |
| 5 | Login with empty credentials | * Enter null values in email and password in login form. * Click to login button | Email: null  password: null | Error message | Error message | pass |

* Signup

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Test case | Description | Test step | Test data | Expected result | Actual result | Status |
| 1 | Signup with empty field | * Enter null values in all fields of signup form. * Click to signup button | Fullname: null  Email: null  password: null  confirm pass: null | Error message | Error message | Pass |
| 2 | Signup with invalid information | * Enter invalid Fullname,Email,Password,Confirm Password in signup form. * Click to signup button | Fullname: Ubaid  Email:  Ubaid#gmail.com  password: 12345@  confirm pass:  12345 | Error message | Error message | pass |
| 3 | Signup with valid information | * Enter valid Fullname,Email,Password,Confirm Password in signup form. * Click to signup button | Fullname: Ubaid  Email:  ubaid@gmail.com  password: 12345@  confirm pass:  12345@ | User successfully logged in | User successfully logged in | pass |

* Community Tab (CRUD Operations)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Test case | Description | Test step | Test data | Expected result | Actual result | Status |
| 1 | Create new job with correct Data | * Click on create new button. * Enter Title, Role, Category, Duration, Price, Image, Location, Description, file upload | Title: printing  Role: vendor  Category: 3d printing  Duration: 2 days  Price: 2000  Image: URL  Location: karahi  Description: description  file upload: file | Job posted successfully | Job posted successfully | Pass |
| 2 | Create new job without correct Data | * Click on create new button. * Null values of Title, Role, Category, Duration, Price, Image, Location, Description, file upload | Title: null  Role: null  Category: null  Duration: null  Price: null  Image: null  Location: null  Description: null  file upload: null | Error occurred | Error occurred | Pass |
| 3 | Edit job with correct data | * Click on Edit button. * Edit Title, Role, Category, Duration, Price, Image, Location, Description, file upload | Title: printing  Role: vendor  Category: 3d printing  Duration: 1 days  Price: 3000  Image: URL  Location: karahi  Description: description  file upload: file | Job edited successfully | Job edited successfully | Pass |
| 4 | Edit job without correct data | * Click on Edit button.   Edit Title, Role, Category, Duration, Price, Image, Location, Description, file upload to null values | Title: null  Role: null  Category: null  Duration: null  Price: null  Image: null  Location: null  Description: null  file upload: null | Error occurred | Error occurred | Pass |
| 3 | Delete job with correct ID | * Click on Delete button. * Enter ID to delete | ID: 201 | Job deleted successfully | Job deleted successfully | pass |
| 4 | Delete job with wrong correct ID | * Click on Delete button.   Enter wrong ID to delete | ID: null | Error occurred | Error occurred | pass |

**8 Future Directions and Conclusion**

**8.1 Future Directions**

It’s fundamental to layout the potential ways for assist advancement and inquire about that seem improve the project's affect and productivity within the future. Consider the following points:

**Integration of Rising Innovations:**  
Investigate the potential integration of cutting-edge advances such as AI and machine learning for prescient analytics, upgraded client involvement, and mechanized quality control forms.

**Worldwide Showcase Infiltration:**  
Layout techniques for scaling the stage to reach worldwide markets, counting localization of substance, adherence to worldwide guidelines, and associations with abroad printing sellers.

**Supportability Activities:**  
Consider joining supportability activities, such as advancing the utilize of eco-friendly materials and reusing programs, to address natural concerns related with 3D printing.

**Community Engagement and Instruction:**  
Highlight plans to cultivate a more grounded community around the stage through instructive programs, workshops, and occasions that energize development and aptitude improvement in 3D printing.

**Stage Security Upgrades:**  
Propose progressing endeavors to upgrade stage security, defending client information and mental property through progressed encryption strategies and normal security reviews.

**8.2 Extensibility**

In this section of future direction, we discuss how the projects design and architecture are allowed to growth and adaptation.

**Architecture advancement:**

Emphasize the platform`s measured plan, empowering simple integration of modern highlights, administrations, and innovations without noteworthy redesigns.

**API Advancement:**

Highlight plans for creating and uncovering more APIs to energize third-party designers to make complementary instruments and applications that improve the platform's biological system**.**

**Client feedback Circle:**  
Focus on continuously gathering client input and how this input will direct the prioritization of unused highlights and advancements.

**8.3 Conclusion**

**Industry Affect:**  
Talk about the platform's commitment to bridging the crevice between originators, clients, and printing suppliers, and its part in cultivating advancement and collaboration within the 3D printing industry.

**Looking Forward:**  
Conclude with a forward-looking explanation that reflects positive thinking and vision for the platform's future and its continuous commitment to the field of 3D printing.