

Managing a Successful Computing Project including user experience features in Community Portal

Module Project

Module: Managing a Successful Computing Project

Course: : Managing a Successful Computing Project for including user experience features in an

Existing Community Portal (Project Management Plan)

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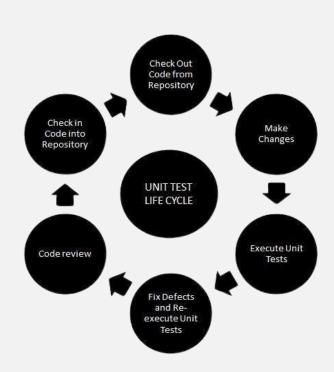
- ☐ List types of Testing
 - Unit testing
 - UAT testing
 - Integration testing
 - Beta testing
 - Black box testing
 - White box testing
 - Usability testing
 - Load testing
 - Security testing

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☐ Functional Testing

Unit Testing

Unit testing is a <u>software</u> development process in which the smallest testable parts of an <u>application</u>, called units, are individually and independently scrutinized for proper operation. This testing methodology is done during the development process by the software developers and sometimes QA staff. The main objective of unit testing is to isolate written code to test and determine if it works as intended.





User Acceptance Test

UAT (User Acceptance Testing) is a type of testing performed by the end-user or the client to verify the software system before moving the software application to the production environment. UAR is done in the final phase of testing after functional, integration, and system testing is done



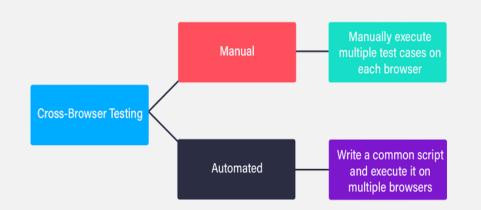


■ Non-Funtional Testing

Cross-browser Testing

cross-browser testing, additionally called browser testing, is a great assurance (QA) system that checks whether a web-based totally application, site, or web page feature is meant to stop users across multiple browsers and devices.

- Reduction of repetitive work
- Greater consistency and repeatability
- Ease of access to information about tests or testing

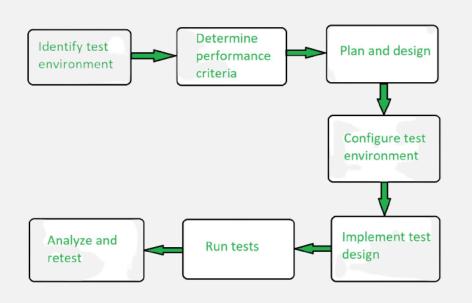




☐ Performance Testing

Overall performance testing is a form of software testing that guarantees software packages perform well underneath their anticipated workload. it's miles a trying out technique completed to determine device overall performance in phrases of sensitivity, reactivity, and balance under a particular workload.

performance testing is the procedure of studying the fine and capability of a product. it's far a checking out method carried out to determine the system performance in phrases of pace, reliability, and stability under varying workloads. overall performance trying out is also called Perf testing.





☐ Load Testing

Load testing is a sort of performance testing that determines the overall performance of a device, software product, or software utility below actual life primarily based on load conditions. basically, load testing determines the behavior of the utility while multiple users use it at the identical time. It is the reaction of the system measured under various load conditions. The burden testing is finished for regular and severe load conditions



2. How Different Test Helps



☐ Functional Testing

□ Unit Testing

- 1. Helps developer write better code
- 2. It helps developer to catch bugs earlier
- 3. It makes the code more easy to refactor

☐ User Acceptance Testing

- 1. Keeping ongoing maintenance costs as low as possible
- 2. Increase end-user happiness
- 3. Increasing software robustness and usability

☐ Integration Testing

- 1. Integration testing for different modules at the same time is easy.
- 2. It can be used in the early as well as later stages of the testing process.
- 3. It improves test coverage and provides an additional level of reliability.

2. How Different Test Helps



- Non-Functional Testing
- Cross Browser Testing
 - 1. Reduction of repetitive work
 - 2. Greater consistency and repeatability
 - 3. Ease of access to information about tests or testing
- □ Performance Testing
 - 1. Measure the speed, accuracy and stability of software
 - 2. Performance testing allows you to keep your users happy
 - 3. Improve optimization and load capability
- □ Load Testing
 - 1. Minimizes the cost of failure for organizations.
 - 2. Improves software scalability.
 - 3. Reduces the risk for system downtime.

3. Tests Selected



- ☐ List the testing methods selected to test the project
- ☐ Functional Testing
 - 1. Unit Testing
 - 2. User Acceptance Testing (UAT)
- Non-Functional Testing
 - 1. Cross Browser Testing

4. Test Schedule

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☐ Scheduling:

No	Web page	Weighting	Functional Points (FP)	Total
1	Registration	3	5	15
2	Login	2	3	6
3	Logout	1	3	3
4	Forgot Password	3	3	9
5	Search Users	2	4	8
6	Update user profile	2	2	4
7	View user profile	1	5	5
8	Posting Jobs	2	2	4
9	View User Response	2	5	10
10	Send bulk email	3	2	6
11	Apply Job	3	3	9
	Total functional points			79
	Estimated person hour/ FP	2		
	Total hours needed	158		
	Total days needed (8h/day)			19

4. Test Schedule



☐ Test Schedule:

Test Schedule ID :	TS001		
Product ID / Name :	ABC Community Portal		
Product Version or Build:	1.0		
Present Owner :	ABC PVT LTD		
Created On :	25/09/2022		
Review On :	12/10/2022		
Review By :	Chathu	QA Manager	
Review Comments :	Good		
Current Version :	1.0		
Change Details :	Not Available		
Current Status :	Approved		
Signing Off Authority :	Kevin, Leo, Kara	Software Developer, QA Manager, Client	10/07/2022



☐ Unit Testing (Registration)

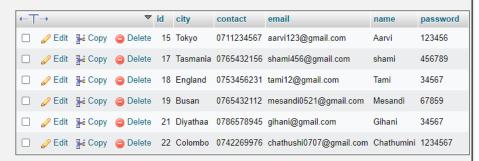
<u>9</u>	Test Case	Preconditions	Test Step	Test Data	Expected Results	Actual Results	Pass / Fail
TC001	Test Case 1	The user should have the URL of the website and open the homepage of the abcjobs.com	 Type URL Click "Sign up" on the website home page linked to the registration page. Enter all the fields. Click submit. Run Junit4 	Name = Chathu Email = chathu@gmail.com Phone = 0742269976 City = Colombo Password = 12345 Repeat Password = 12345	Not register	As expected,	Pass
TC002	Test case 2	The user should have the URL of the website and open a homepage of the abcjobs.com	 Type URL Click "Sign up" on the website home page linked to the registration page. Enter all details except the name Click submit. 	Name = chathu Email =chathushi0707@gmail.com Phone = 0742269976 City = Colombo Password = 12345 Repeat Password = 12345	Email will sent to the registered email account	As expected,	pass
TC003	Test case 3	The user should have the URL of the website and open a homepage of the abcjobs.com	 Type URL Click "Sign up" on the website home page linked to the registration page. Enter all the fields Enter all details except the email address Click submit. 	Full Name: Chathushi Jayarathna Email Address: chathushi0707@gmail.com Phone Number:0742269976 Select Gender: Female Password: 1234 Repeat Password:1234	Data will be saved in the database	As expected,	pass



☐ Unit Testing

```
package abcjobportal.test;
import static org.junit.Assert.assertEquals;
@RunWith(SpringRunner.class)
@ContextConfiguration(locations = "/spring-servlet.xml")
public class Register {
     @Autowired
     private UserService userService;
        @Autowired
       private ApplicationDAO applicationDAO;
        @Test
         public void Registertest() {
             User user=new User();
             user.setId((long) 23);
             user.setName("ku");
            user.setEmail("ku@gmail.com");
             user.setPassword("23456");
             user.setContact("0768976543");
             user.setCity("Badulla");
         userService.registerUser(user);
         Long n=user.getId();
         Long m=(long) 23;
         assertEquals(n, m);
```

Database Before



Database After

4	1	→		$\overline{}$	id	city	contact	email	name	password
		<i></i> €dit	≩- € Copy	Delete	15	Tokyo	0711234567	aarvi123@gmail.com	Aarvi	123456
		<i></i> €dit	≩ € Copy	Delete	17	Tasmania	0765432156	shami456@gmail.com	shami	456789
		<i></i> €dit	≩ € Copy	Delete	18	England	0753456231	tami12@gmail.com	Tami	34567
		<i></i> €dit	≩ € Copy	Delete	19	Busan	0765432112	mesandi0521@gmail.com	Mesandi	67859
		<i></i> €dit	≩- Copy	Delete	21	Diyathaa	0786578945	gihani@gmail.com	Gihani	34567
		<i></i> €dit	≩ € Copy	Delete	22	Colombo	0742269976	chathushi0707@gmail.com	Chathumini	1234567
		<i> </i>	≩ € Сору	Delete	23	Badulla	0768976543	ku@gmail.com	Ku	23456



☐ Unit Testing (Login)

Test Case ID	Test Case	Preconditions	Test Step	Test Data	Expected Results	Actual Results	Pass / Fail
TC001	Test Case 1	The user should have the URL of the website and open a homepage of the abcjobs.com	 Type URL Fill up the form of login with already registered an account. Click submit. Run Junit4 	Email = chathushi0707@gmail.com Password = 1234567	Loaded welcome t hank you page	As expected,	Pass
TC002	Test case 2	The user should have the URL of the website and open a homepage of the abcjobs.com	 Type URL Click "Sign up" on the website home page linked to the registration page. Fill up the form with wrong password Click submit. 	Email = chathushi0707@gmail.com Password = 12345	Welcome thank you page not loaded	As expected,	pass

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□ Unit Testing

```
import org.springframework.test.context.ContextConfiguration;
import org.springframework.test.context.junit4.SpringRunner;
import com.spring.mvc.dao.ApplicationDAO;
import com.spring.mvc.model.User;
import com.spring.mvc.servic.UserService;
@RunWith(SpringRunner.class)
@ContextConfiguration(locations = "/spring-servlet.xml")
public class Login {
      @Autowired
        private UserService userService;
           @Autowired
           private ApplicationDAO applicationDAO;
           @Test
           public void loginTest() {
               User user=new User();
               user.setEmail("aarvi123@gmail.com");
               user.setPassword("123456");
               userService.loginUser(user);
               String m=user.getPassword();
               String n="123456";
               assertEquals(m,n);
```

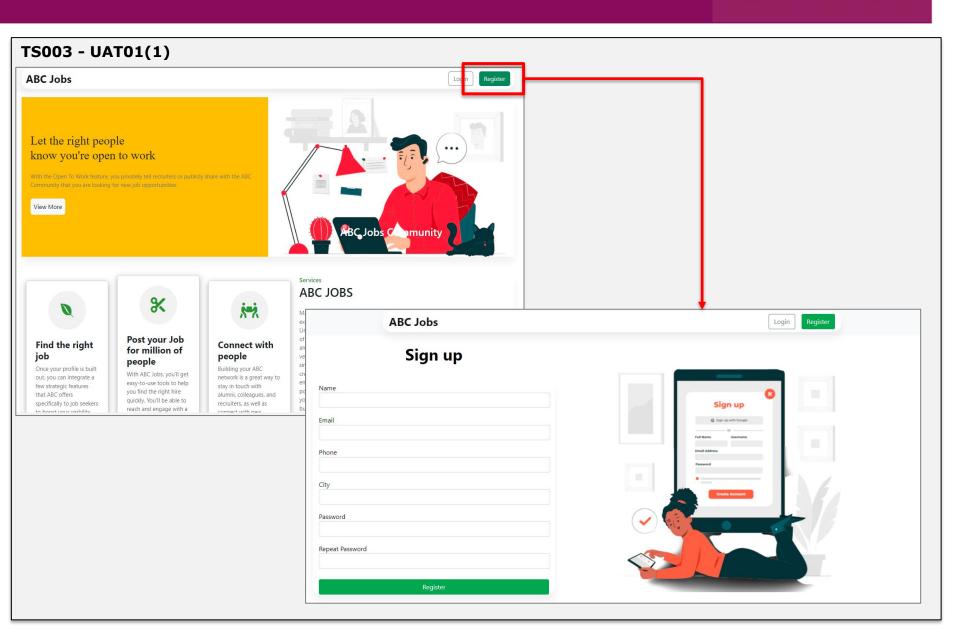


☐ User Acceptance Testing

Test Scenario	Landing Page
TS003	
Test Cases	UAT Testing
UAT01	Check each hyperlink menu is loading correct page

Scenari o ID	Tes t Cas e ID	Test Case	Precon ditions	Test Step	Test Data	Expected Results	Actu al Resu Its	Pass / Fail	Evide nce
TS003	UAT 01	Check hyperlink menu is loading the correct	The user should have the URL of the	Go to Microsoft Edge	Click on the register link	Loaded Register page	As expec ted,	Pass	UAT 01(1) UAT 01(2)
		page	website and open a homepa ge of the abcjobp ortal.co m	Type www.abcjobp ortal.com and enter Click on all the links provided for test	Click on the login link	Loaded Login Page	As expec ted,	Pass	UAT 01(1) UAT 01(3)

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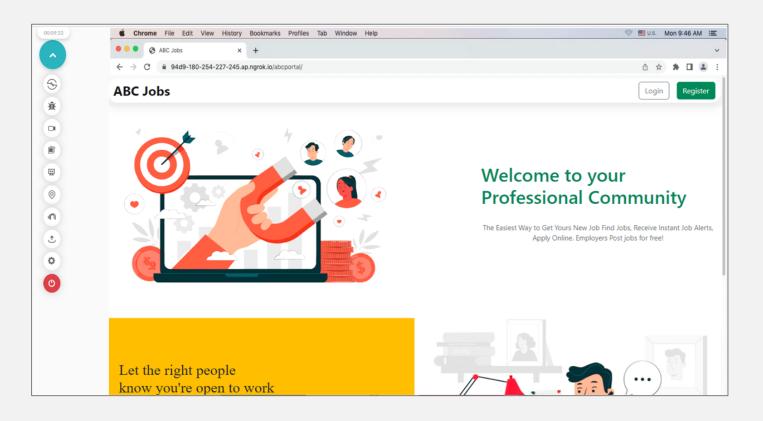
☐ Cross Browser Testing

Test Scenario	Check that the application is run normally on multiple web
TS003	browser
Test Cases	Cross Browser Testing
CBT01	Check browser can run on Google Chrome web browser using lamdatest

Scen ario ID	Test Case ID	Test Case	Precondi tions	Test Step	Test Data	Expected Results	Actual Result s		Eviden ce
TS00 3	CBT0 1	Check browser can run on Google Chrome web browser using lamdatest	The user should have the URL of the website and open a homepag e of the abcjobpor tal.com	Go to Microsoft Edge Type www.abcjob portal.com and enter Click on all the links provided for test	ABC Jobs Portal website hosted in ngrok software	Run normally as it should	As expect ed,	Pass	CBT 01(1)

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☐ Cross Browser Testing



7. Project Milestones & Tasks



Project Task ID	Project Task Description	Project Milestone ID
1	Analyze and suggest choice of Test Methods	1
2	Schedule the Test Optimally	1
3	Develop the Phase Test Plan	1
5	Develop Test Cases & Scripts	2
6	Execute the Tests & Document the results	3

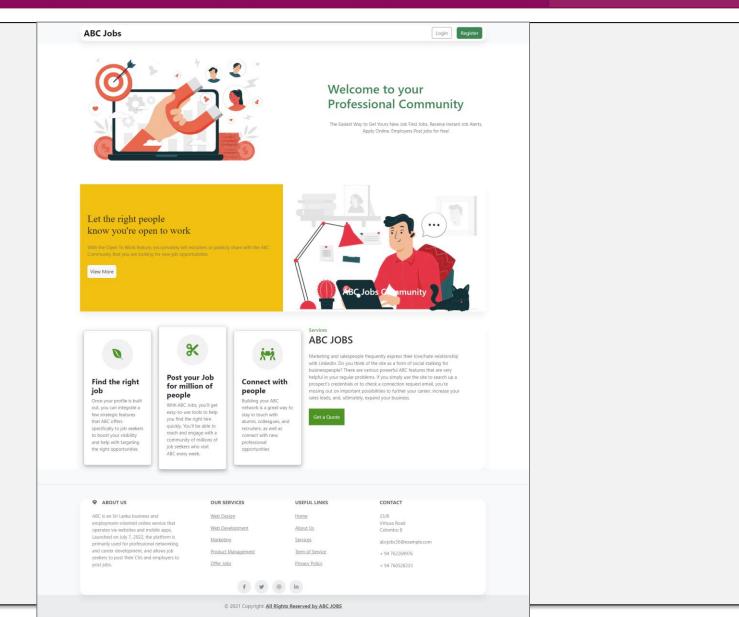
8. Milestone Feedback & Action taken



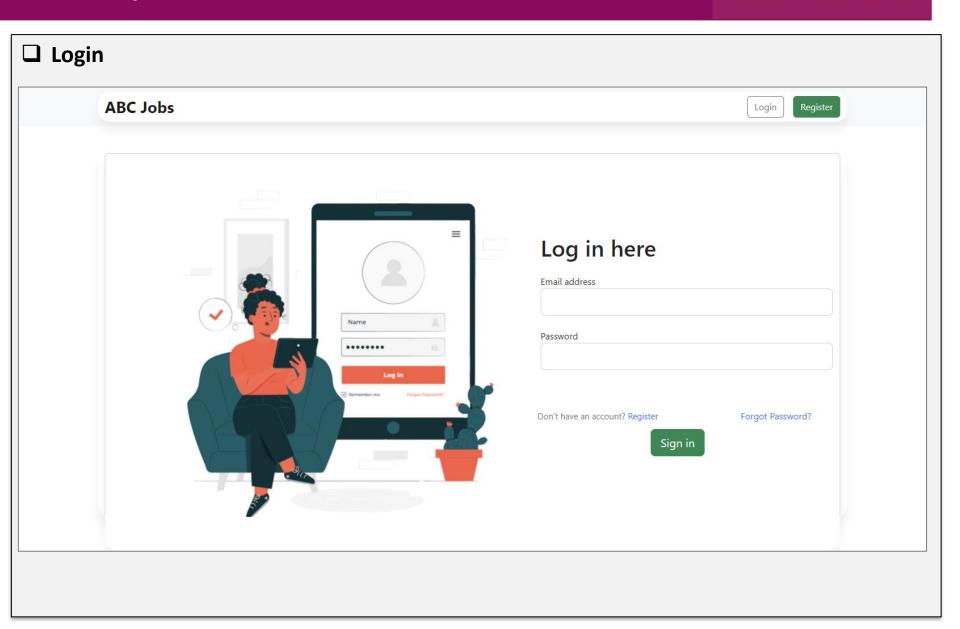
Project Milestone ID	Milestone Feedback received from Tutor / Learning Facilitator	Action Taken (Yes / No)
1	Adding scheduling calculation in project presentation	Yes
2	Test the DAO layer directly	Yes

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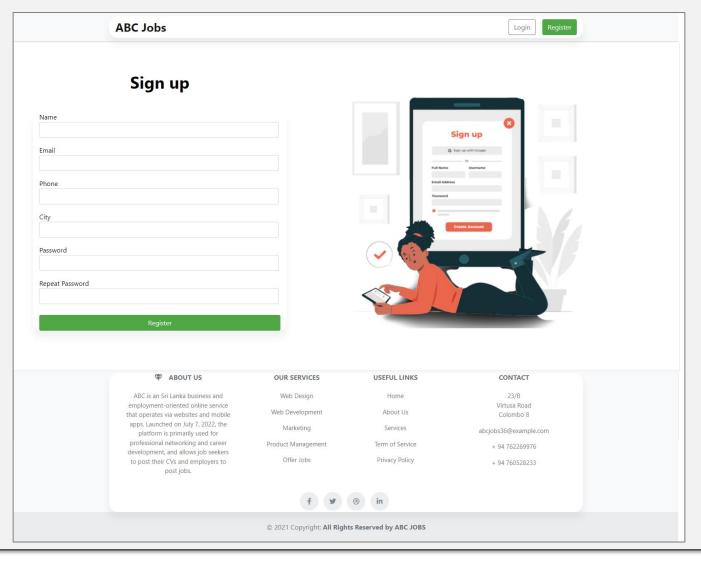






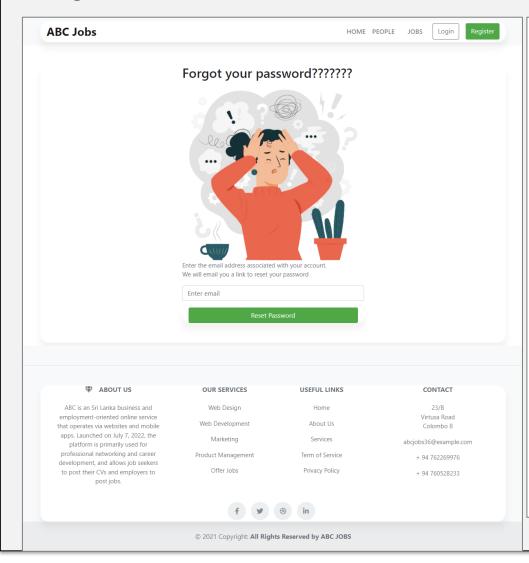
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☐ Registration



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□ Forgot Password



Forgot Password Confirmation

Forgot Password Confirmation

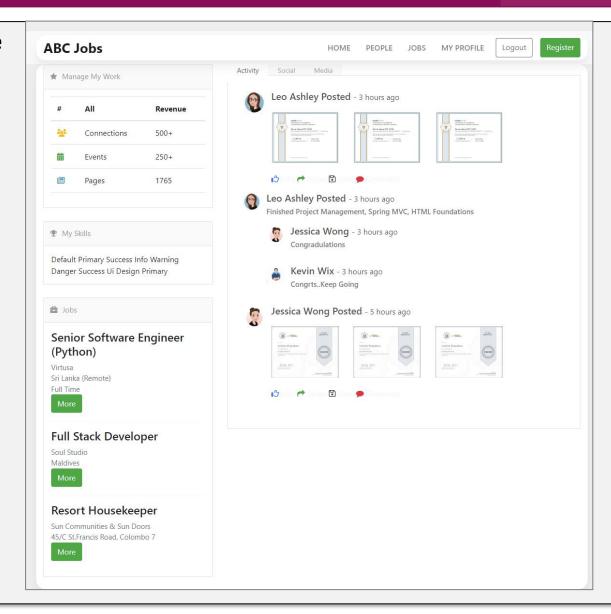


As per your request,
you will receive an email with a temporary password.
Use this password to login.
Once logged in, you will be able to change your password.

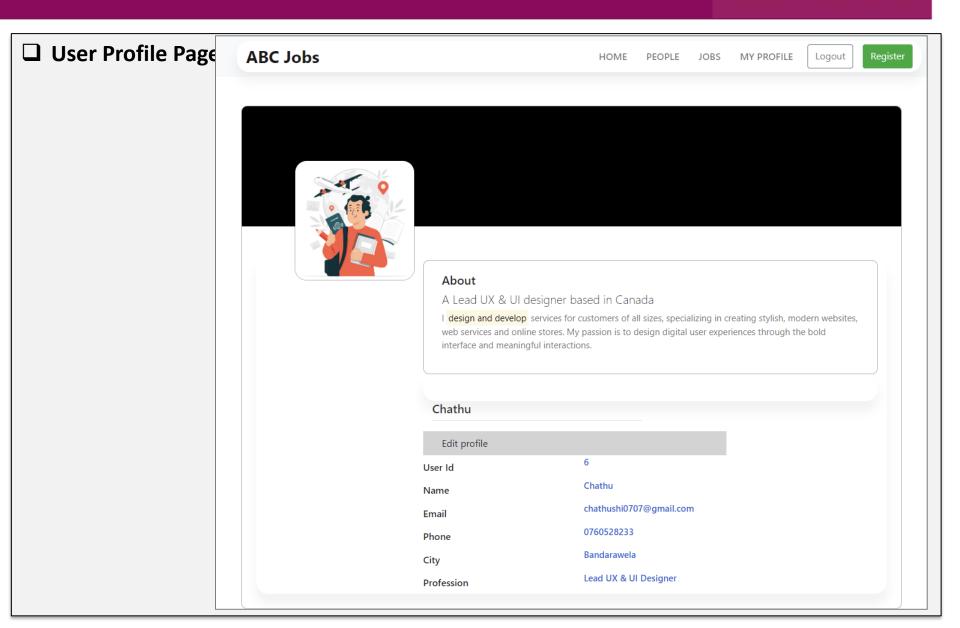
Back To Home

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☐ User Home Page





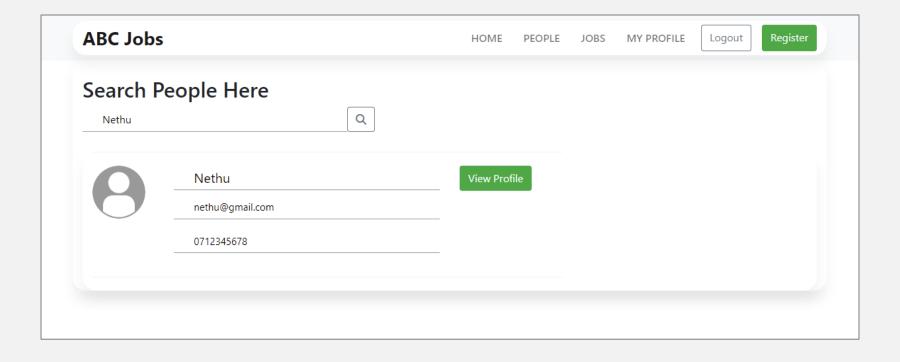




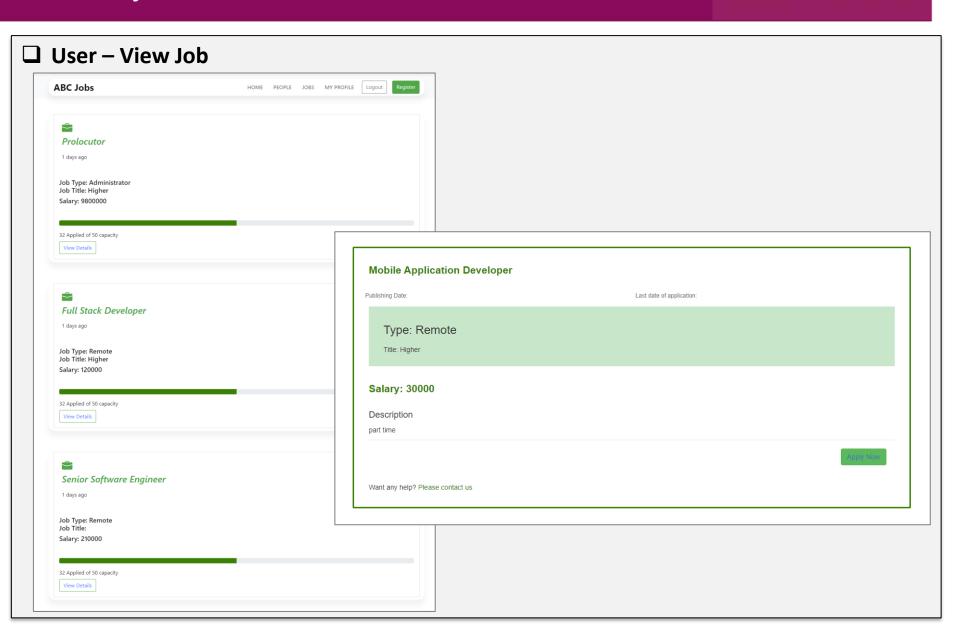
Name Chathu Email chathushi0707@gmail.com City Bandarawela Phone 0760528233	ABC Jobs		HOME	PEOPLE	JOBS	MY PROFILE	Logout	Register
Email chathushi0707@gmail.com City Bandarawela Phone 0760528233		Name						
chathushi0707@gmail.com City Bandarawela Phone 0760528233		Chathu						
City Bandarawela Phone 0760528233		Email						
Phone 0760528233		chathushi0707@gmail.com						
Phone 0760528233		City						
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		Phone						
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☐ Search User Page

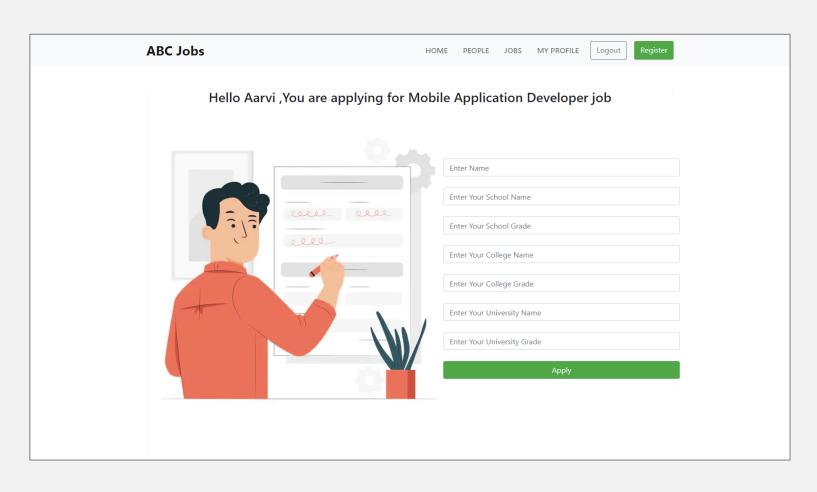






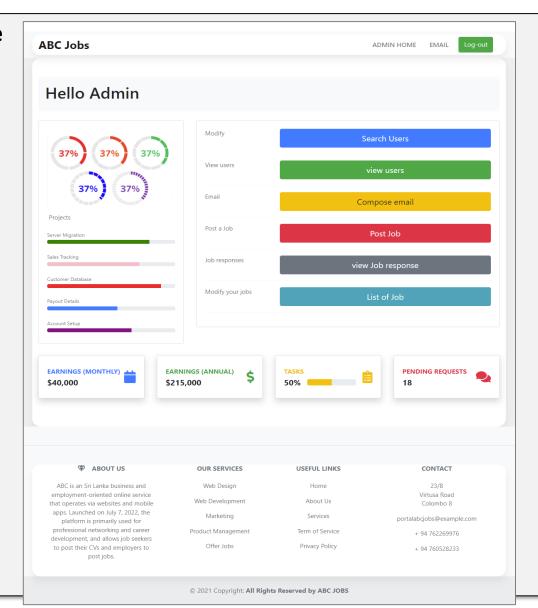
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□ Apply Job



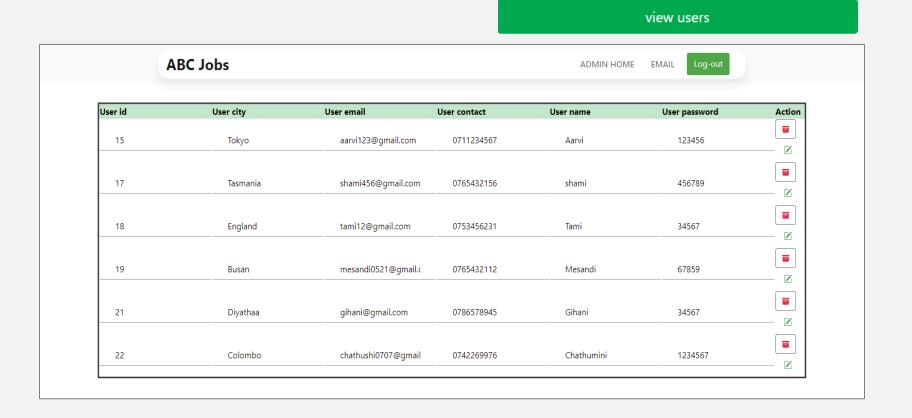
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☐ Admin Profile Page

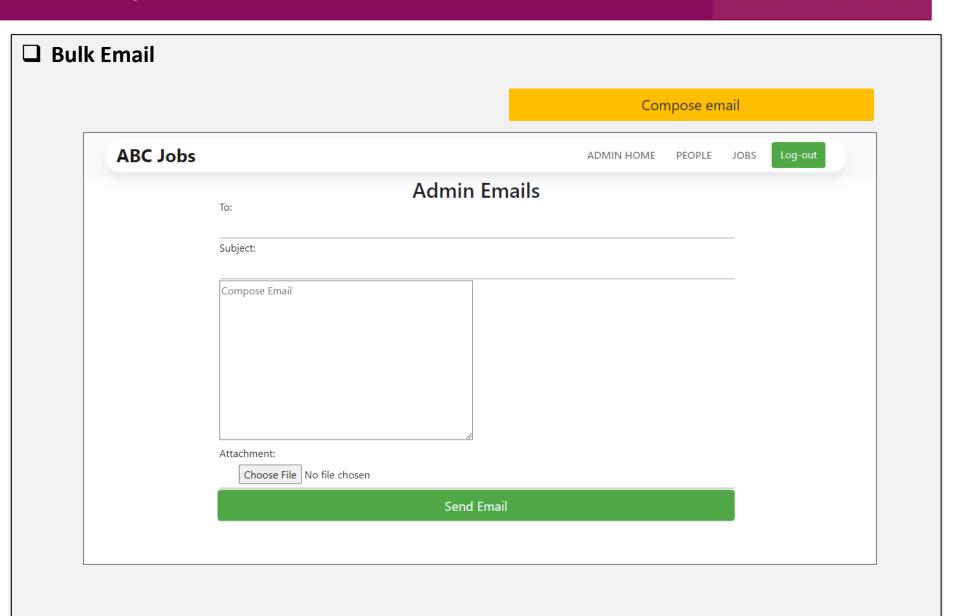




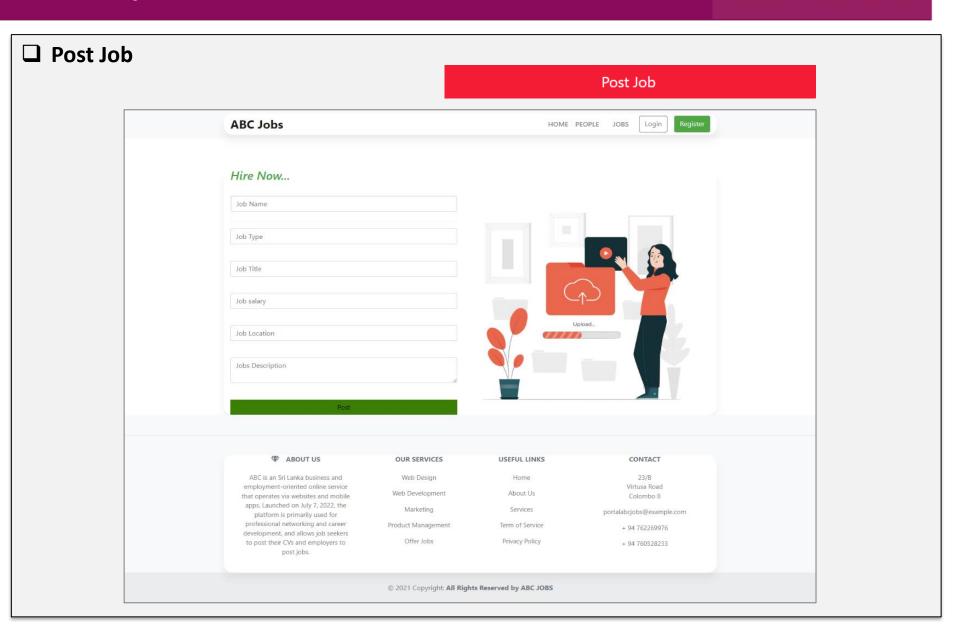
□ Admin View User Page











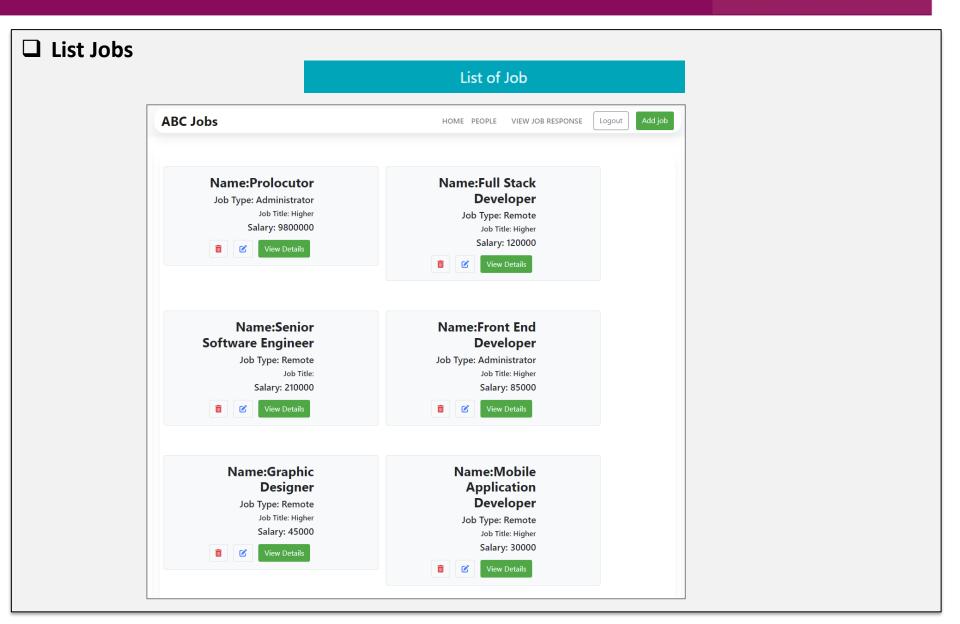


☐ View Job Response

view Job response

	ABC Jobs				HOME PEOPLE JOBS Login Register							
Applied job id	User Details	Job Details	Applied name	User School Name	User School Grade	User College Name	User College Grade	User University Name	User University Grade	Status	Action	
8	User [id=18, name=Tami, city=England, password=34567, contact=0753456231, email=tami12@gmail.com]	Jobs [job_id=5, name=Senior Software Engineer, type=Remote, title=, location=Lyon, France, salary=210000, description=Full Time - Mid Senior Level]	Tami	St.Thomas College	4.8	St.Thomas College	5.0	Moratuwa Engineering Faculty	6.0	status	Delete	
13	User [id=15, name=Aarvi, city=Tokyo, password=123456, contact=0711234567, email=aarvi123@gmail.com]	Jobs [job_id=1, name=Prolocutor, type=Administrator, title=Higher, location=Colombo, salary=9800000, description=None]	Aarvi	Kandy High School	3.4	Kandy High School	6.5	Peradeniya Medical Faculty	5.5	status	Delet	
14	User [id=15, name=Aarvi, city=Tokyo, password=123456, contact=0711234567, email=aarvi123@gmail.com]	Jobs [job_id=3, name=Full Stack Developer, type=Remote, title=Higher, location=Tokyo, Japan, salary=120000, description=mnbvcxzkjh]	Aarvi	Kandy High School	4.8	Kandy High School	5.0	Peradeniya Medical Faculty	6.0	status	Delet	
15	User [id=15, name=Aarvi, city=Tokyo, password=123456, contact=0711234567, email=aarvi123@gmail.com]	Jobs [job_id=5, name=Senior Software Engineer, type=Remote, title=, location=Lyon, France, salary=210000, description=Full Time - Mid Senior Level]	Aarvi	Kandy High School	4.8	Kandy High School	5.0	Peradeniya Medical Facultyy	3.75	status	Delet	
16	User [id=15, name=Aarvi, city=Tokyo, password=123456, contact=0711234567, email=aarvi123@gmail.com]	Jobs [job_id=11, name=Mobile Application Developer, type=Remote, title=Higher, location=SolomoIT, salary=30000, description=part time]	Aarvi	Kandy High School	4.8	Kandy High School	5.0	Peradeniya Medical Faculty	5.5	status	Delet	





11. Proposed Improvements



☐ List of Improvements

- Making better test script
- Learn more about testing software application