



American International University-Bangladesh (AIUB)

Department of Computer Science

Faculty of Science & Technology (FST)

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Section: B

Software Quality Assurance and Testing

Quick Med (A total healthcare solution in one app)

A Report submitted

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Software Test Plan

for

<QuickMed>

Version 1.0 approved

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<8 Dec 2022>

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Revision History

Revision	Date	Updated by	Update Comments
0.1	2022.12.06	Hossain Ahmed Himel	First Draft
0.2	2022.12.07	Anowar,Md.Asif	Second Draft
0.3	2022.12.07	Hossain Ahmed Himel	Third Draft
0.4	2022.12.08	Uddipta Kumar Roy	Fourth Draft

1. TEST PLAN IDENTIFIER: RS-MTP01.3

2. REFERENCES

Requirement's document

3. INTRODUCTION

3.1 Background to the Problem

Healthcare apps face several securities and privacy issues because they store their patients' personal information as well as their patients' health reports. As a result, hospitals relying on direct data access to manage all system data are extremely vulnerable. The majority of the health care app is overly dense. They attempt to include a wide range of information on their home page. This results in UI bugs. Here is a list of the most common web application bugs:

- Bugs in Cross-Browser Adaptability
- Form Validation Issues
- Usability flaws.
- Page Layout Inconsistencies Across Devices.
- Broken UI Elements Cause Misbehavior.
-

Most software cannot provide users with quick services. They are unable to provide services as promised due to inadequate infrastructure and a lack of maintenance. Every second counts in the medical field. It is a big fall if something happens on a daily basis.

3.2 Solution of the problem

- It ensures 100% data security.
- It ensures faster service to the users.
- It has the simplest UI to facilitate user understanding.

Here is the QuickMed System's master test plan. This test plan outlines the testing strategy, methodology schedule, estimation, deliverables, and resources that will be used to evaluate the RS-MTP01.3. The design, development, and testing of these reports will be based on the management project of QuickMed System's. The Test Plan supports us in determining the amount of effort necessary to check the application's quality.

4. REQUIREMENT SPECIFICATION

4.1 SYSTEM FEATURES

QuickMed offers a multitude of highlights to be explored. None of these should be tried. A few of them are evaluated. The following list of areas that will be restricted during the application test.

- Admin Panel:
 - ✓ Admin Login with valid username and password.
 - ✓ User management: Add new user, Delete user, Update user/user data, control employee and medicine information.
 - ✓ Role management
- Dashboard:
 - ✓ Chart to select roles
 - ✓ Chart components
- Employee Panel
 - ✓ Doctor login with valid user name and password
 - ✓ Delivery Man login using valid user name and password
 - ✓ They can see their see and edit their working information
- User Panel
 - ✓ User Login using registered user name and password
 - ✓ User Registration
 - ✓ Select Services
 - ✓ Confirm Doctor Consultation
 - ✓ Order Medicine

4.2 SYSTEM QUALITY ATTRIBUTE

- **Usability:** A user can easily order product and confirm consultation, employee always focus and update it which is also updated on user side, it's user-friendly.
- **Efficiency:** This system is really efficient for the user, good performance they can notice from the system.
- **Reliability:** This system is reliable, as well user can easily use it, it's reliable in any condition to the others.
- **Integrity:** This system is enough same for user; their data is enough in it as well we remain private on this occasion.

- **Flexibility:** This system is enough flexible, user can anything can easily modify some information overall it's flexible.

4.3 SYSTEM INTERFACE

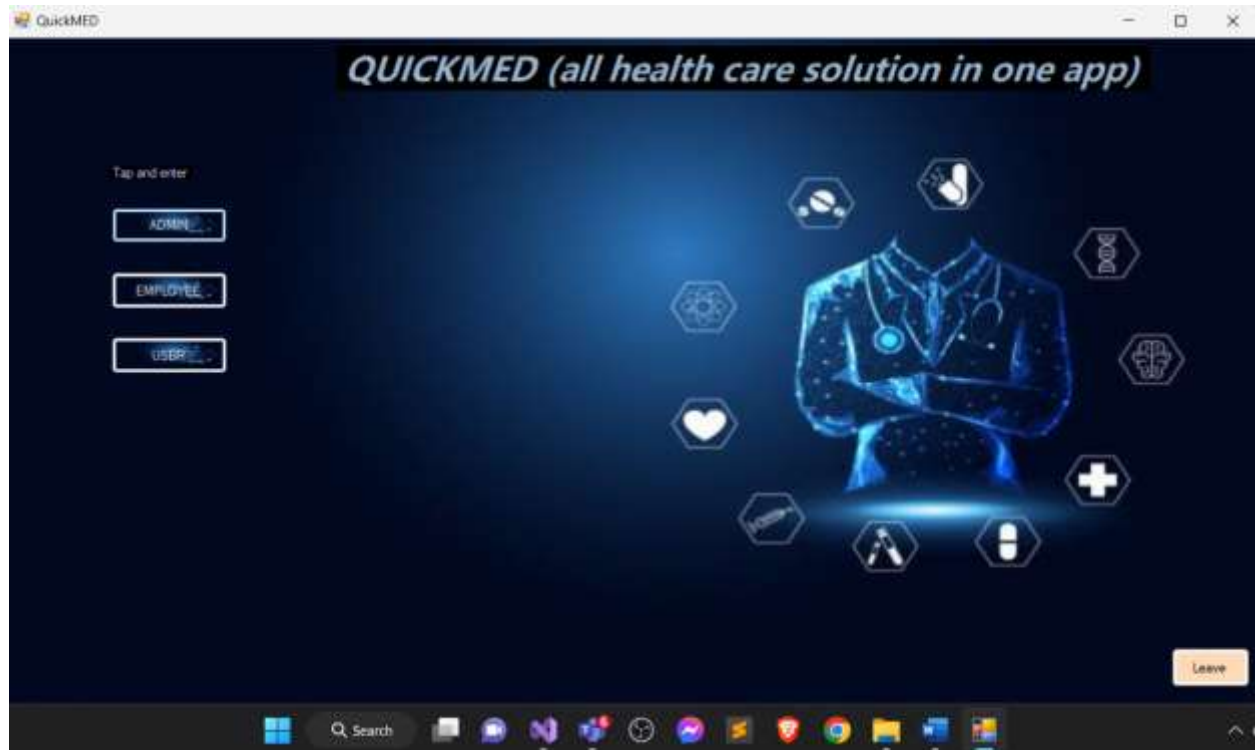


Figure: Application interface 1



Figure: Application interface 2

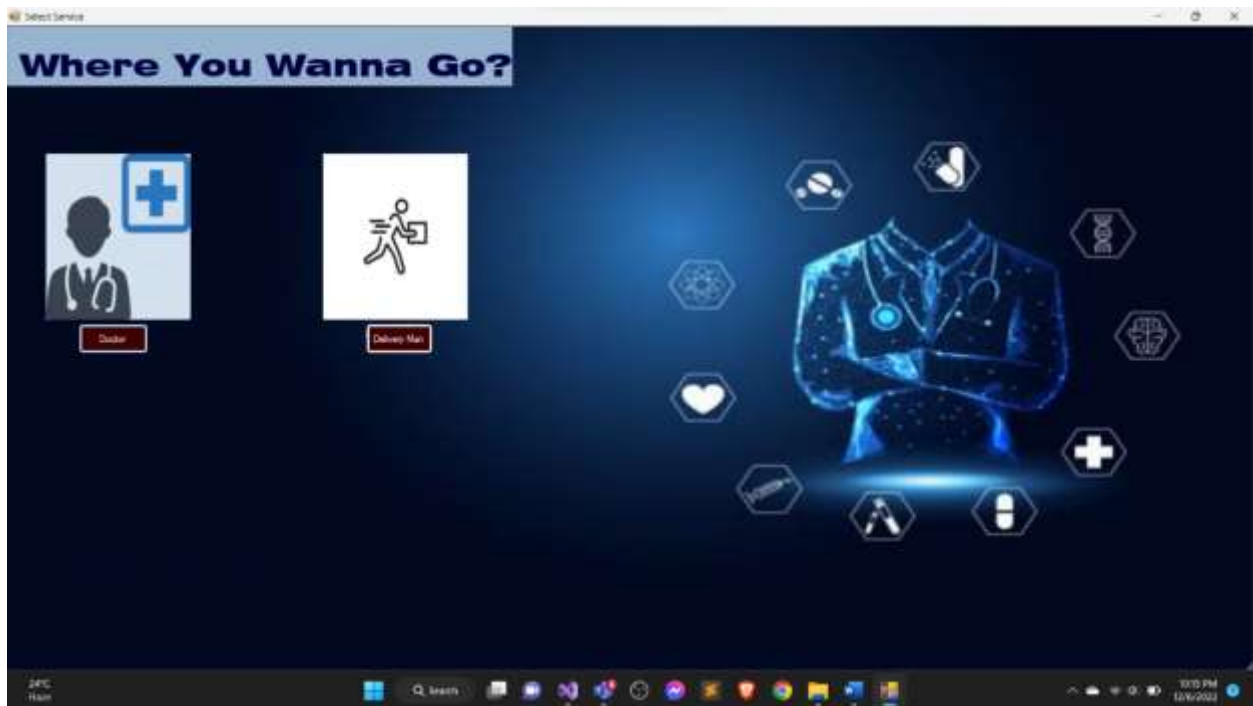


Figure: Application interface 3



Figure: Application interface 4

4.4 PROJECT REQUIREMENTS

- ❖ Semi-detached project;
- ❖ code: 20000 lines appx.

- ❖ Effort: $E = a (kloc)^b$, where $a = 3$ $b = 1.12$
 So, $E = 85.96$ P.M (per person avg.)

- ❖ Dev. Time: $c * E^D = 2.5 * (85.96)^{0.35} = 11.88$ MONTHS
- ❖ People required: E/D . $T = 7$ Persons

Total budget: 289780 BDT

5. FEATURE NOT TO BE TESTED

- Profile
- Contact Role
- Medicine Role

6. TESTING APPROACH

6.1 Testing levels

Proactive methodology will be utilized in this unique situation. Where the testing methodology will be completed, as soon as could be expected, even before the improvement of the underlying programming construct. The procedure might be viewed as preventive methodology to find and fix abandons. Every one of the methodologies are expressed beneath as steps.

- ❖ **Unit testing:** The littlest piece of programming or a particular element will be tried first.
- ❖ **Integration testing:** All the littlest piece those are called unit, will be incorporated collectively.
- ❖ **System testing:** After the incorporation, all things considered, the whole framework without wanting to be tried.
- ❖ **Stress testing:** Software execution will be tried as the responsibility increments. As this framework will be utilized in many spots by many individuals simultaneously.
- ❖ **Acceptance testing:** Finally, the framework will be tried by the inward workers as und client testing is absurd in this delicate case.

6.2 TESTING TOOL

The test tool to be used in katalon. We used katalon to test the Desktop Application.

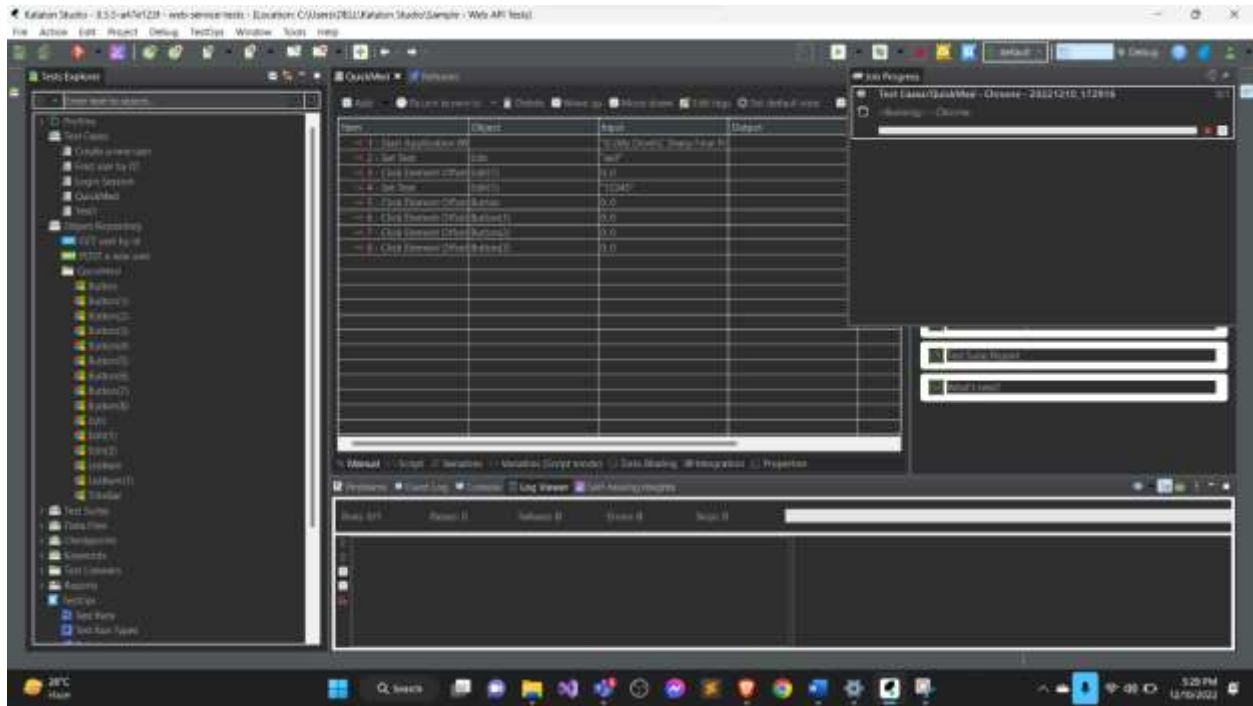


Figure: User Login Session

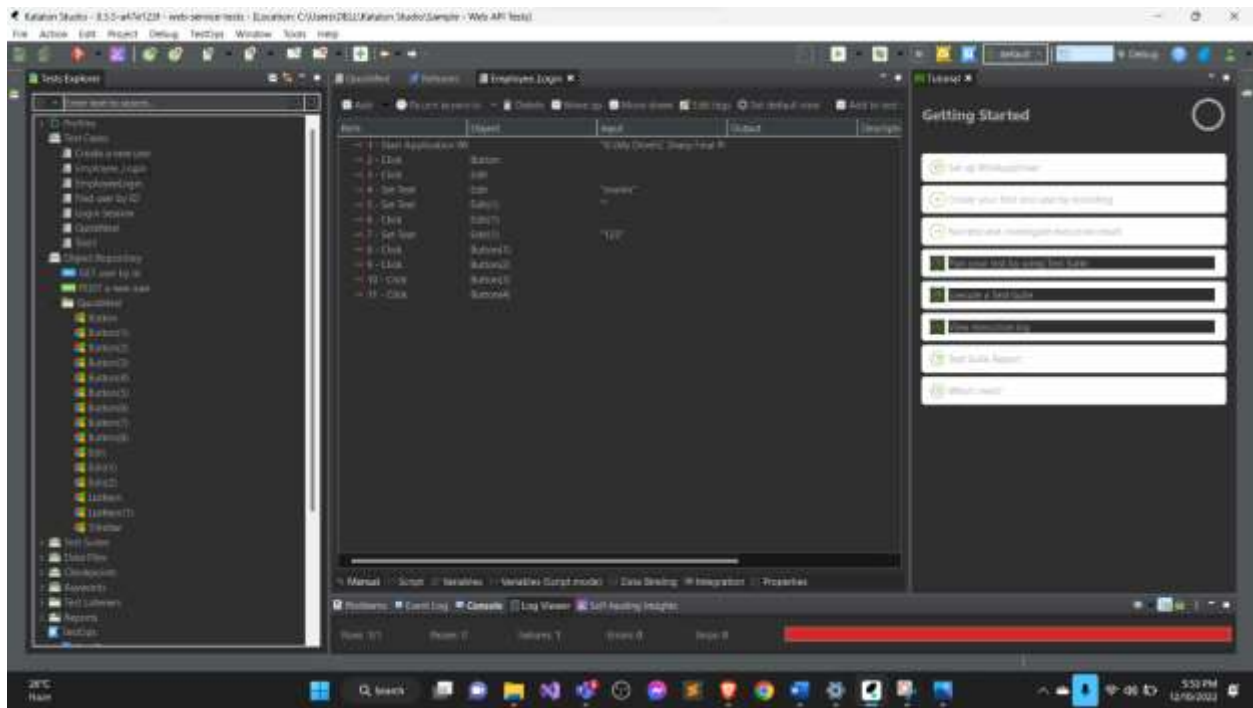


Figure: Employee Login Session

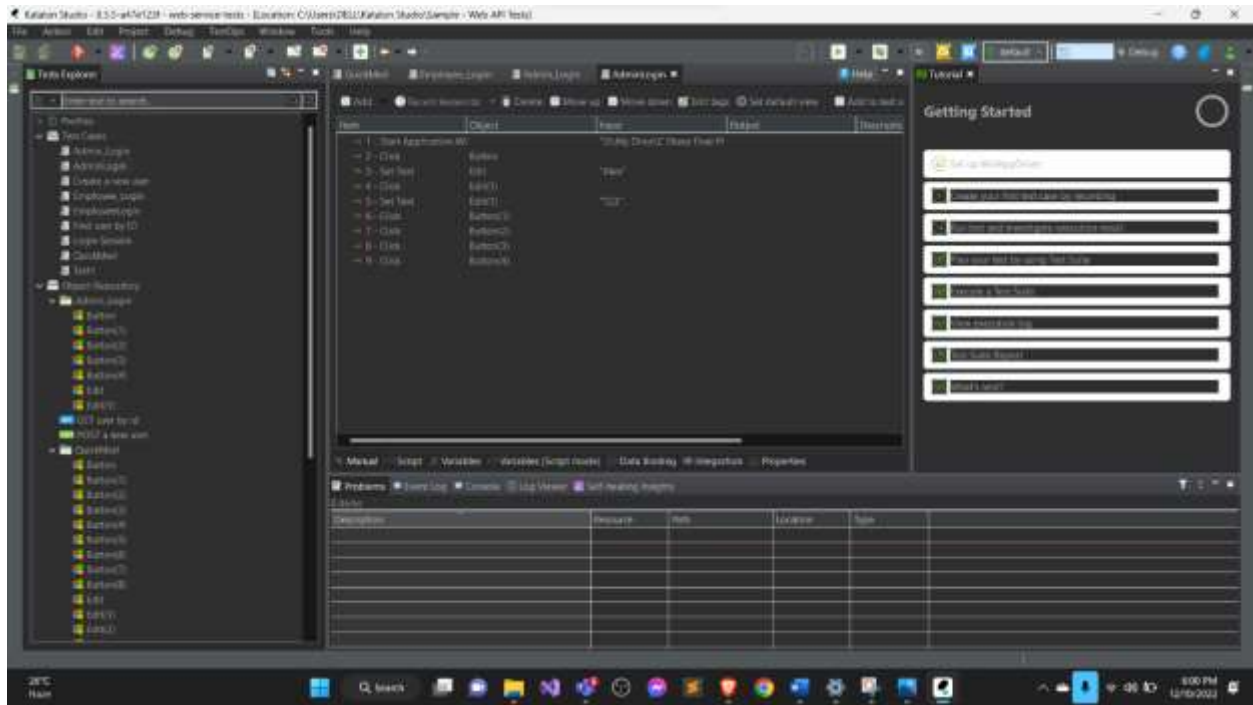


Figure: Admin Login Session

6.3 MEETING

The test team will meet once every two weeks to evaluate progress to date and to identify error trends and problems as early as possible. The test team leader will meet with development and the project manager once every two weeks as well. These two meetings will be scheduled on different weeks. Additional meetings can be called as required for emergency situations.

Date	Meeting Name	Purpose
2022.12.8	System Checking	To monitor the system either working properly or not.
2022.12.9	Bug Fixing	To resolve all the stated bugs in the console.
2022.12.10	Final Meeting	To clear out all the anomalies and rechecking the requirement specification.

7. TEST CASE/ TEST ITEM

7.1 TEST ITEM

- ❖ Check user login with verified username and password.
- ❖ Check user can order medicine.
- ❖ Check user can apply for doctor consultation.
- ❖ Check employee login with verified username and password.
- ❖ Check employee can see and edit the report.
- ❖ Check admin login.
- ❖ Check admin can add, delete, update all things.
- ❖ Check logout button.

7.2 TEST CASE

Project Name: QuickMed		Test Designed by: Hossain Ahmed Himel		
Test Case ID: FR_1		Test Designed date: 8/12/2022		
Test Priority (Low, Medium, High): Medium		Test Executed by: Hossain Ahmed Himel		
Module Name: User Login Session		Test Execution date: 10/12/2022		
Test Title: login with valid username and password				
Description: Test application user login page				
Precondition (If any): User must have valid username and password				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the application 2. Enter User role 3. Enter Username 4. Enter password 5. Click Login	Username: asif Password: 12345	User should login into the application	As expected	Pass
Post Condition: User is validated with database and successfully login to account. The account session details are logged in the database.				

Project Name: QuickMed		Test Designed by: Hossain Ahmed Himel		
Test Case ID: FR_2		Test Designed date: 8/12/2022		
Test Priority (Low, Medium, High): Medium		Test Executed by: Hossain Ahmed Himel		
Module Name: Employee Login Session		Test Execution date: 10/12/2022		
Test Title: login with valid username and password				
Description: Test application Employee login page				
Precondition (If any): Employee must have valid username and password				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the application 2. Enter Employee role 3. Enter Username 4. Enter password 5. Click Login	Username: marlin Password: 123	User should login into the application	As expected	Pass
Post Condition: User is validated with database and successfully login to account. The account session details are logged in the database.				

Project Name: QuickMed		Test Designed by: Hossain Ahmed Himel		
Test Case ID: FR_3		Test Designed date: 8/12/2022		
Test Priority (Low, Medium, High): Medium		Test Executed by: Hossain Ahmed Himel		
Module Name: Admin Login Session		Test Execution date: 10/12/2022		
Test Title: login with valid username and password				
Description: Test application Admin login page				
Precondition (If any): Admin must have valid username and password				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the application 2. Enter Admin role 3. Enter Username 4. Enter password 5. Click Login	Username: Alex Password: 123	User should login into the application	As expected	Pass
Post Condition: User is validated with database and successfully login to account. The account session details are logged in the database.				

8. ITEM PASS/FAIL CRITERIA

- Employee work report should be on their profile.
- User should order or apply using valid Gmail.
- All button should work properly and system sequency.

9. TEST DELIVERABLES

- Test strategy
- Test plan and estimation
- Test scenario
- Test cases
- Test data
- Defect report/ Bug report
- Test execution report
- Test summary report
- Test closure report
- Test status report

10. STAFFING AND TRAINING NEEDS

During the first quarter of the task the venture/test chief can assume the job of a full time Test engineer with low maintenance test architect to help with the audit and introductory arranging of the project. After the underlying form has been done, the approval and check testing need 2- full time analyzer and one of them should be the individual associated with undertaking from the origins helping analyzer.

So, the workers should check skills whether they are qualified to work on the project. If there is no skill, some training can be arranged to enhance the skills of the worker.

10.1 Training Needs

Here in training needs the Test administrator and Project Manager needs to team up with an organization workforce also, train on the inward working of a course portion stream and find out about accessible courses and essential course needs.

11. RESPONSIBILITIES

- Acts as primary contact for development and QA team.
- Responsible for Project schedule and the overall success of the project.
- Understand requirements
- Writing and executing Test cases

- Preparing
- Reviewing Test cases
- Defect reporting and tracking
- Retesting and regression testing
- Bug Review meeting

	TM	PM	DEV Team	Test Team	Client
Acceptance Test Documentation and Execution	X	X		X	X
System/ Integration Test Documentation and Execution	X		X	X	
Unit Test Documentation and Execution	X		X	X	
System Design Reviews	X	X	X	X	X
Detail Design Reviews	X	X	X	X	
Test Procedures and Rules	X	X	X	X	
Screen and Report Prototype Reviews			X	X	X
Change Control and Regression Testing	X	X	X	X	X

12. TESTING SCHEDULE

Time has been allocated within the project plan for the following testing activities. The specific dates and times for each activity are defined in the project plan timeline. The persons required for each process are detailed in the project timeline and plan as well. Coordination of the personnel required for each task, test team, development team, management and customer will be handled by the project manager in conjunction with the development and test team leaders.

Task Name	2022.12.3	2022.12.5	2022.12.7	2022.12.9	2022.12.10
Documentation	S,S	S,M			
Design		M			
Test Plan		M	M,W		
Unit Testing			W,T,F		
Integration Testing				S,S	
System Testing				M,T,W	
Acceptance Testing				T,F	
Project Completion					F,S
feedback					F,S

13. PLANNING RISKS AND CONTINGENCIES

When testing is to commence, there are insufficient personnel resources. Insufficient hardware, software, data, or tools are available. The software, hardware, or tools were delivered late. Training on the application or tools takes longer than expected. Modifications to the original specifications or designs. Application testing has a lot of complexities. Specify how various events will be handled. For example, by December 8, 2022, the definition of requirements will be complete, and if the requirements change after that date, the following actions will be taken: The test and development schedules will be pushed back by the appropriate number of days. Because most projects have set delivery dates, this rarely happens.

14. APROVALS

For the project, we'll need to follow a few stages. They are as follows:

Project Test Lead	This is in charge of the project's overall testing. This person is also in charge of ensuring that the service is of high quality.
Test Manager	The Test Manager is in charge of performing quality assurance tests and executing test strategies. Different test managers may be assigned to different test kinds or areas of the project, but you'll require that position every time a test type is executed.
Test Designer	The test designer is in charge of the successful definition and implementation of the test approach. This function includes determining the best techniques, tools, and procedures for implementing the required tests, as well as providing advice on the resources needed for testing.
Test Approver	This person is in charge of examining, validating, and approving the test materials that the test designer has prepared.
Tester	The person in charge of executing test scripts and reporting the results. Many testers can collaborate on projects or work on different projects at the same time. Some of them are even automatable.