

# DisasterGuard: Real-Time Natural Disaster Prediction and Safety Advisory App

## **Test plan :**

The test plan for the DisasterGuard app involves conducting functionality testing to ensure that each feature operates as expected. The testing will cover the eight identified functional requirements, including real-time temperature monitoring, disaster alerts, safety guidelines, user reporting, emergency rescue, contact lists, disaster preparation checklists, and volunteer coordination. Functionality testing will be conducted by a team consisting of a Lead Tester, two Senior Testers, and three Junior Testers. Each tester will be responsible for specific features, ensuring comprehensive coverage. The testing will be implemented using unit tests for individual components, system testing to verify the app's overall functionality, and integration testing to ensure that different parts of the system work together seamlessly. After functionality testing, acceptance testing will be conducted to validate that the app meets the end-users' needs and business requirements. This phase will involve key stakeholders and will be carried out in the last week, ensuring that the app is ready for deployment. Functionality testing will take place during the first two weeks, followed by acceptance testing in the final week.

# 1

Project Name : DisasterGuard: Real-Time Natural Disaster Prediction and Safety Advisory App			Test Designed by : Md. Abu Towsif	
Test Case ID : FR_15			Test Designed date :02-09-2024	
Test Priority( Low, Medium, High) : High			Test Executed by :	
Module Name : Rescue Team in Emergency situation upon users request			Test Execution date :	
Test Title : The app shall send emergency rescue team to the user upon users request for emergency help				
Description : Test the app’s ability to send a rescue team to the user's location upon request and track the user's real-time location.				
Precondition (If any) : The user must have give location access to the Disasterguard app				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass / Fail)
1. Open the application 2. Go to the Rescue Team page 3. Enter Request Type 4. Location will be auto fetched of the user 5. Click on ‘Submit’	Request Type: "Rescue Emergency"; User Location: "Kuratoli, Dhaka".	After click on the ‘Submit’ button the app shall receive the rescue request and send team to that specific location for rescue the user		
Post Condition : User is successfully rescued from the emergency location and reached at a safe place.				

## 2

Project Name : DisasterGuard: Real-Time Natural Disaster Prediction and Safety Advisory App			Test Designed by : Md. Abu Towsif	
Test Case ID : FR_7			Test Designed date :02-09-2024	
Test Priority( Low, Medium, High) : High			Test Executed by :	
Module Name : Real-Time Temperature Monitoring:			Test Execution date :	
Test Title : The app shall display real-time temperature data for the user's current location.				
Description :Verify that the app displays accurate real-time temperature data for the user's current location and allows viewing temperatures for other locations.				
Precondition (If any) : The user must have allow access location and GPS enabled				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass / Fail)
1. Open the application 2. By default app will be redirected to the ‘Home’ page 3. If not , go to the ‘Home’ page	Location: "Kuratoli"  GPS Enabled: "Yes".	The app should display the current temperature for New York, NY, and allow viewing temperatures for other cities.		
Post Condition :				

### 3

Project Name : DisasterGuard: Real-Time Natural Disaster Prediction and Safety Advisory App			Test Designed by : Md. Abu Towsif	
Test Case ID : FR_19			Test Designed date :02-09-2024	
Test Priority( Low, Medium, High) : High			Test Executed by :	
Module Name : Emergency Contact List			Test Execution date :	
Test Title : The app shall allow users to create and manage a list of emergency contacts.				
Description : Ensure that the app allows users to manage a list of emergency contacts and notifies them when the user is in a disaster-affected area.				
Precondition (If any) :				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass / Fail)
1. Open the application 2. Go to the ‘Contact List’ page 3. Add or edit contact list	Contact Name: "Md. Abu Towsif"  Contact Number: "01883838383"	The app should add the contact to the emergency list and notify them if the user is in a disaster-affected area		
Post Condition :				

# 4

Project Name : DisasterGuard: Real-Time Natural Disaster Prediction and Safety Advisory App			Test Designed by : Md. Abu Towsif	
Test Case ID : FR_21			Test Designed date :02-09-2024	
Test Priority( Low, Medium, High) : High			Test Executed by :	
Module Name : Disaster Preparation Checklists			Test Execution date :	
Test Title : The app shall provide checklists for users to prepare for various types of natural disasters.				
Description : Verify that the app provides customizable checklists for disaster preparation and sends reminders for completing tasks.				
Precondition (If any) : User should log in to the application using userid and password to save their checklists in the database				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass / Fail)
1. Open the application 2. Go to the ‘Checklist’ page 3. Edit and maange the checlists	Checklist Type: "Hurricane Preparedness";  Task: "Stock up on water".	The app should allow the user to customize the checklist and send reminders for completing the tasks.		
Post Condition :				

# 5

Project Name : DisasterGuard: Real-Time Natural Disaster Prediction and Safety Advisory App			Test Designed by : FARJANA YESMIN OPI	
Test Case ID : FR-8			Test Designed date : 02/09/2024	
Test Priority( Low, Medium, High) : High			Test Executed by :	
Module Name : Disaster Alerts and Forecast			Test Execution date :	
Test Title : Disaster Alert Notification Accuracy Test				
Description : Verifies that disaster alerts are accurate, timely, and correctly delivered to users.				
Precondition (If any) : The system must have access to current and accurate disaster data to generate and test alerts.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass / Fail)
1. Open the Application 2. Allow to access location 3. Check notification	Location: Kuratoli, Dhaka	User receives the alert notification through the email or SMS within the expected timeframe.		
Post Condition : The user is notified of the relevant information according to their location.				

# 6

Project Name : DisasterGuard: Real-Time Natural Disaster Prediction and Safety Advisory App			Test Designed by : MD SIFAT HOSEN	
Test Case ID : FR-23			Test Designed date : 02/09/2024	
Test Priority( Low, Medium, High) : High			Test Executed by :	
Module Name : Volunteer Coordination and Support			Test Execution date :	
Test Title :Volunteer Availability Update				
Description : Test the app’s feature for coordinating volunteer efforts, allowing user to sign up for opportunities and communicate with organizations				
Precondition (If any) : The volunteer is already registered and has an active account in the system.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass / Fail)
1. Log Into the application  2. Navigate to the ‘volunteer’ page  3. Sign up as a ‘volunteer’  4. Manage and check availability and accessibility update	Volunteer Role : ‘Food Distribution’  Availability : ‘Weekends’	The app should allow the user to sign up for the role and receive on volunteer needs		
Post Condition :				

Project Name :DisasterGuard: Real-Time Natural Disaster Prediction and Safety Advisory App			Test Designed by : MD. MASUM BILLAH NABIL	
Test Case ID : VR_11			Test Designed date :2-9-2024	
Test Priority( Low, Medium, High) : Medium			Test Executed by :	
Module Name : User Reporting in Emergency			Test Execution date :	
Test Title : Verify Emergency Report Accuracy				
Description : Confirm that the information submitted by users in emergency reports is accurately captured and reflected in the system.				
Precondition (If any) :				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass / Fail)
1.Check 'Report Emergency' is present. 2.Click and confirm the reporting page loads. 3.Verify form fields are correct and data is processed. 4.Simulate errors and verify app responses.	Emergency Type: ‘Flood in downtown area’  Media : ‘Attached Image’	The app should allow user to submit the emergency report successfully		
Post Condition :				



Project Name :DisasterGuard: Real-Time Natural Disaster and Safety Advisory App			Test Designed by : SABED BIN SARWAR	
Test Case ID : VR_10			Test Designed date :2-9-2024	
Test Priority( Low, Medium, High) : High			Test Executed by :	
Module Name : Safety Guidelines and Procedure			Test Execution date :	
Test Title : Safety Protocols and Procedures availability				
Description : Ensure that the app provider relevant safety guidelines and procedures for various natural disasters, including evacuation routes and emergency contacts.				
Precondition (If any) : The emergency reporting system must be fully operational and accessible to users.				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass / Fail)
1.Review the safety guidelines and procedures documentation to ensure all requirements are understood. 2.Conduct a walkthrough or simulation of the procedures in a controlled environment to verify adherence. 3.Assess compliance through observation and documentation, and address any discrepancies or areas for improvement.	1.Safety Protocol Documents 2.Incident Scenarios 3.Compliance Checklists	Ensures that the safety guidelines are implemented correctly and are effective in real-world scenarios.		
Post Condition :				