Requirements	Type of test (I:Integration S:System ,O:Operational, ,UN:Unit, ,US:Usability, A:Acceptance)	Pass or Fail (P: Pass,F: Fail)	Contributor (SS: Syed Saad, AN:Ashish Nayak , TN: Tawana Ndlovu, JS: Jan Suratos)
Functional Requirements			
1- User			
1.1 Verify that a local user view weather on app opened when connected to Wi-Fi or cellular network with data enabled.	S, A		
1.2 Users should be able to view a five day forecast	S, A		
1.3 Users should be able search a location by name	S, A		
1.4 User should be able to create an account if doesn't have one already	O, A		
1.5 User should login to access the following features	S, A		
1.6 User should be able to login to access and edit their dashboard information	S, A		
1.7 User should be able to save up to five locations	S, A		
1.8 User should be able to share their dashboard information	S, A		
1.9 User should receive error message if location is not sent	S, A		
1.10 User Should be able to customize dashboard from given options			
2 - Weather Data Retrieval			
2.1 The system should connect to the external WeatherApp API and retrieve data for the current weather.	I, S		
2.2 The system should connect to the external WeatherApp API and retrieve 5-day forecast data.	I, S		
2.3 The system should update weather data on the dashboard at regular intervals.	UN		
2.4 The system should handle API errors and display appropriate messages to the user.	O, A		
2.5 The system should format and display temperature, weather conditions, and weather icons.	A		
3 - Dashboard Customization			
3.1 The system should allow users to customize the dashboard by adding or removing locations	US, A		
3.2 The system should allow users to change the color of the dashboard.	US, A		
3.3 The system should allow users to set a preferred format for displaying weather data.	US, A		
3.4 The system should save dashboard preferences upon user action.	S, A		
3.5 The system should load saved preferences when the user logs in.	S, A		
4 - Firebase Authentification			
4.1 The system should use the Firebase API to authenticate users during login.	UN, S		
4.2 The system should securely store user credentials via Firebase.	UN, S		
4.3 The system should restrict access to dashboard and settings for unauthenticated users.	UN, S		
4.4 The system should log out users and end sessions upon request.	UN, S		
5 - CI/CD Pipeline			
5.1 The system should automatically build and test on every new commit.	S		
5.2 The system should deploy succesfully without errors.	S		
5.3 The system should send notifcation for failed builds or tests.	S		

6 - Automated Testing	
6.1 The system should run unit tests on critcal components like API requests and data formatting.	UN, S
6.2 The system should run integration tests for end-toend user flows.	UN, S
6.3 The system should run User Interface tests to ensure a responsive and accesible interface.	UN, S

Non Functional Requirements	
1 - Security	
1.1 The system should prevent unauthorized access to user accounts , data and personal information.	O
1.2 The system should use secure connections (HTTPS) for API requests.	O, UN
2 - Usability	
2.1 The system should have a user-friendly interface that is intuitive for all users	US
2.2 The system should allow users to recover from all errors and exceptions without crashing	US
2.3 The system should provide help messages for key user actions.	US
2.4 The application should be able to run on various browsers	US
2.5 The application should be able to run on various devices	US
3 - Reliability	
3.1 The system should use recover from API errors and inform users.	O, US
3.2 The system should maintain session data for the duration of user interaction.	O, A
4 - Performance	
4.1 The system should load weather data within 5 seconds of request.	O, A, US
4.2 The system should function optimally on moderate internet connection.	O, A, US
5 - Maintainability	
5.1 The system should be modular to support easy updates and bug fixes.	UN, S
5.2 The codebase should follow a consistent style guide to improve readability.	S, I
5.3 Every section of code must be documented to support easy updates and bug fixes.	S, I
6 - Availability	
6.1 The system should be available 100% of the tiume during peak usage hours.	US, A, O
6.2 The system should display maintainece message if temporarily unavailable.	US