

Test Plan for Team 2: ResQ

1. Team Information

- a. Name: ResQ
- b. Team members: Hanah Ligman, Blake Deleo, Chase McClellan, Katelyn Pomianek, and Brian Andrew Rolbiecki Jr
- c. Preferred communication: email hligman@uwm.edu and bdeleo@uwm.edu

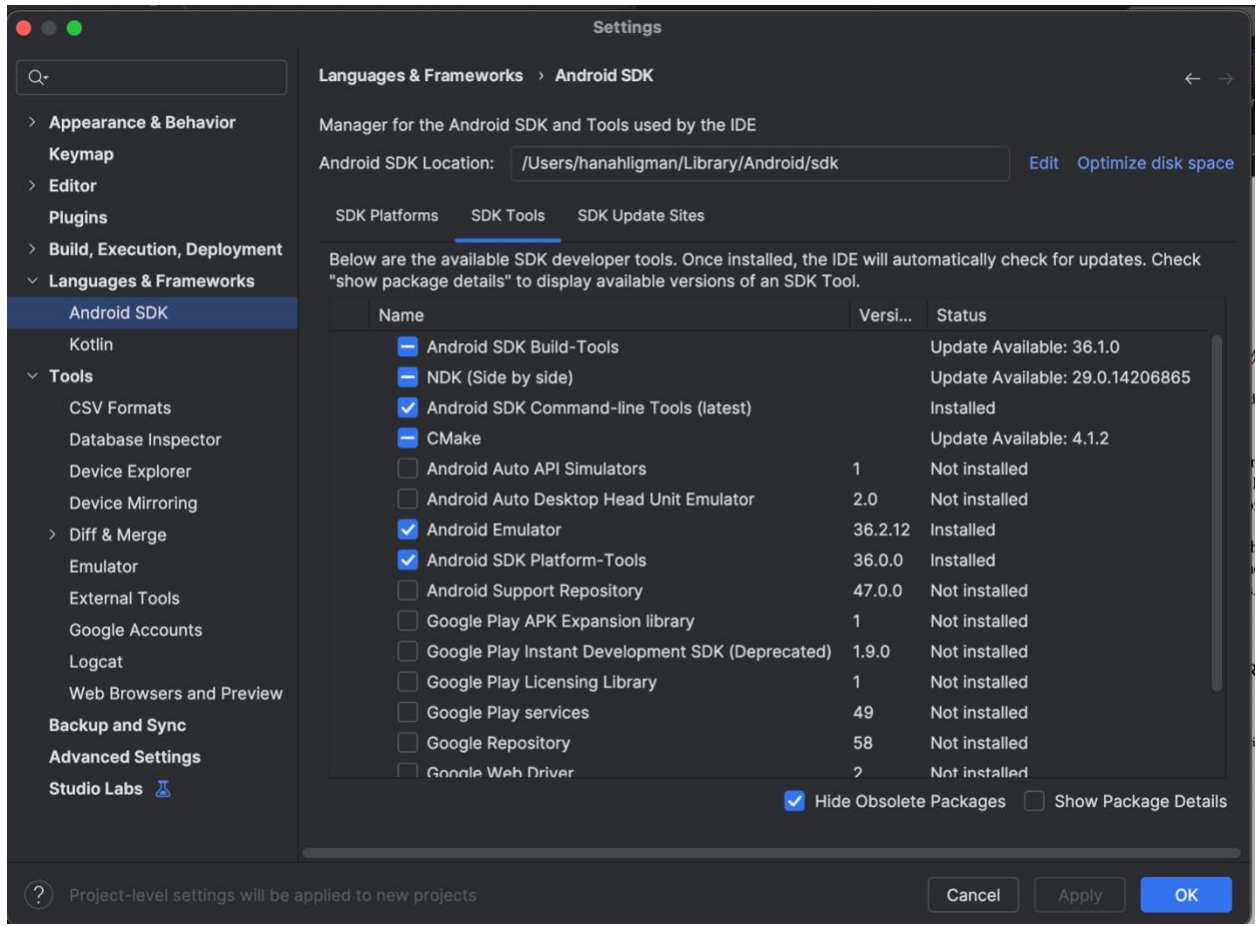
2. System Overview

- a. ResQ is a smart alert system designed for any size event or venue. The system allows attendees to quickly request emergency help with a single tap of a button on their phone. Emergency responders and helpful bystanders receive real-time alerts that include interactive geolocation and a user provided description, along with guidance on the severity of the alert. The system improves emergency response times, enhances response coordination, and saves lives.

3. Access Instructions

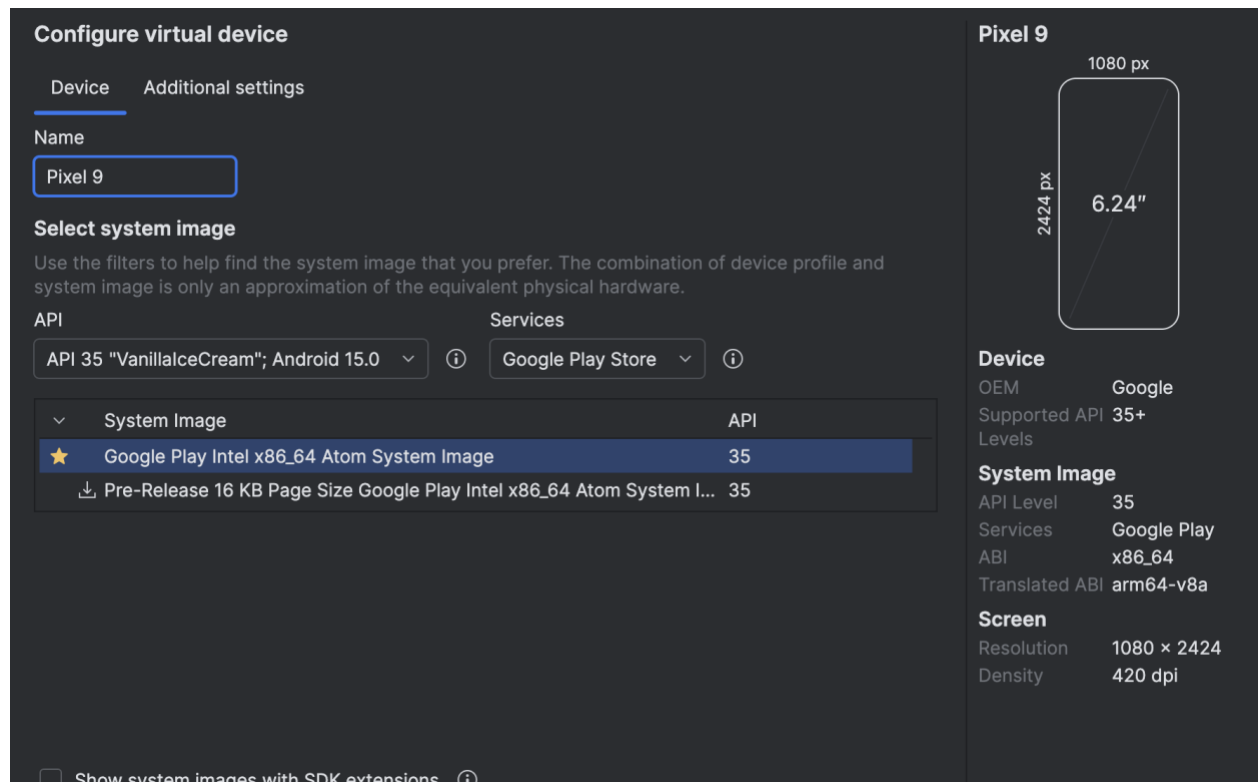
- A. Clone git repository in VS Code: <https://github.com/barjr/ResQ.git>
- B. Download flutter: <https://docs.flutter.dev/get-started/quick>
 - a. Select your OS and follow instructions under **Install and set up Flutter** within the terminal in VS Code

C. Download Android Studio: <https://developer.android.com/studio>



If you are prompted to setup, make your settings look the same as above

- Select Virtual Device Manager
- Select the + to create a virtual device
- Select Pixel 9 with API 35 'VanillaIceCream'; Android 15.0 and Google Play Intel x86_64 Atom System Image with API 35 (shown below)



- D. Run ‘flutter doctor’ to ensure the Android toolchain – develop for Android devices is properly setup (you may have to agree to licensing or run specific commands that will be displayed)
- E. Run the Emulator by going back to the Virtual Device Manager page and selecting the play button
- F. Once the Emulator is up and running, run ‘flutter run’

(If you are unable to setup the app, please direct any questions to the emails provided in Team Information (section 1))

Test Account Credentials

Role	Email	Password	Notes
Admin	admin0@gmail.com	resqadmin	Full Admin Privileges
User	user@gmail.com	resquser	Standard User
Helper	helper@gmail.com	resqhelper	User & Helper

4. Required Test Scenarios

User account:

USR-R1	Tiered Alert – Minor	Tap Get Help (Not SOS) → Select Minor → Add description and location or select the location icon to automatically include your location (optional) → Submit as Minor	Alert created with Minor severity, location, and description. Submitted as MINOR displayed on bottom of screen.
USR-R2	Tiered Alert – Urgent	Same as above, select Urgent	Alert created with Urgent severity. Submitted as URGENT displayed on bottom of screen.
USR-R3	Tiered Alert – Critical	Same as above, select Critical, select Open SOS Report	Alert created with Critical severity. Emergency alert sent to helpers displayed on bottom of screen.

Helper Account:

HLP-R1	Accept an Alert	Select Helper View button to view page of acceptable emergencies. Select Accept to accept emergency	The emergency gets taken by the helper and is now ACCEPTED status
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Admin Account:

ADM-R1	Change role (User → Admin)	Change User/Admin role to/from User/Admin	Role updates instantly, User/Admin gains respective privileges
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5. OPTIONAL TESTS:

A. Common Functionality (All Roles)

Test ID	Test Case	Steps	Expected
CF-01	Successful login	Enter valid credentials, select Login	Login Successful displayed on bottom of screen, correct dashboard shown
CF-02	Invalid Login	Wrong password/email select Login	Login Failed displayed on bottom of screen
CF-03	Logout	Select icon in top right corner	Returned to login screen

B. Admin Role Tests

Test ID	Test Case	Steps	Expected Result
ADM-01	View all accounts	Select Roles on bottom of screen	View all accounts, names, and roles
ADM-02	Change role (User → Helper)	Change User/Helper role to/from User/Helper	Role updates instantly, User/Helper gains respective privileges
ADM-03	Change role (Admin → Helper)	Change Admin/Helper role to/from Admin/Helper	Role updates instantly, Admin/Helper gains respective privileges
ADM-04	Full Helper functionality	Perform all Helper tests (HLP-01 to HLP-08)	All Helper features work the same

C. User Role Tests

Test ID	Test Case	Steps	Expected Result
USR-01	Request Help – SOS Button	Tap floating SOS button. Enter description in Describe the situation text box and location in Location box or select the location icon to automatically include your location (optional) and select Summarize & Submit	Critical alert created with severity, location, and description. Emergency alert sent to helpers displayed on bottom of screen.
USR-02	Cancel Active Alert	After sending alert → Tap “Cancel Alert” button	Alert status becomes “Cancelled”, disappears from helpers’ active list
USR-03	Undo Cancelled Alert	After Cancelling alert, a brief UNDO popup appears at bottom of screen. Tap UNDO.	The cancelled alert reappears in the active list.
USR-04	View First-Aid Guides	Select View Offline Medical Guides button	Guides displayed

USR-05	Search Guides	Use search bar → Type “dehydration”, “bleeding”, etc.	Relevant guides appear at the top or No guides found if none are found from search
USR-06	Zoom Images in Guide	Open a guide → Tap on image	Image opens in full screen

D. Helper Role Tests

Test ID	Test Case	Steps	Expected Result
HLP-01	Full User functionality	Perform all User tests (USR-01 to USR-09)	All User features work the same
HLP-02	View Active Alerts List	Look at Active Emergencies section	All active emergencies from Users
HLP-03	Alert Viewable by multiple helpers	Login as Helper/Admin and then different Helper/Admin and view Active Alerts	Different accounts should see same list of alerts
HLP-04	Alert description is shown when selected	While logged in as helper, select alert name	Description of alert should be displayed with location (if entered), patient profile information, and any medical documents for the patient.
HLP-05	Alert shows ACCPETED After Acceptance	Follow HLP-03 to accept an alert.	Alert is listed as ACCEPTED after being accepted

E. Create Account Tests **please only create 1 test account**

Test ID	Test Case	Steps	Expected Result
CA-01	Page Loads Correctly	Open app → Tap "Create Account"	All fields visible, role defaults to "User", all switches OFF
CA-02	Required Field Validation	Leave all required fields empty → Tap "Create Account"	Form shows red "Required" errors on: Email, Password, Confirm, Name, Phone, DOB, EC Name, EC Phone
CA-03	Invalid Email Format	Enter: notanemail, user@, @gmail.com	"Enter a valid email" error
CA-04	Valid Email Accepted	Enter: yourname@example.com	No error
CA-05	Password < 8 chars	Enter password: abc123	"At least 8 characters" error
CA-06	Password Mismatch	Password: Password123!, Confirm: Different123	"Passwords do not match"
CA-07	Phone Number Validation	Try: 123, 555-abc-1234, 55512345678	"Enter a 10-digit phone" error

CA-08	Valid Phone Accepted	Enter: 555-123-4567, (555) 123-4567, 5551234567	Accepted (digits only checked)
CA-09	DOB Picker Works	Tap DOB field → Pick date → Confirm	Date appears in MM/DD/YYYY format
CA-10	Role Selection – User	Tap "User" radio button	When selected, account role is User
CA-11	Role Selection – Helper	Tap "Helper" radio button	When selected, account role is Helper
CA-12	Bystander Switch OFF → No extra fields	Leave "I am CPR/First Aid certified" OFF	Empty certification fields shown
CA-13	Bystander ON → Required fields appear	Turn ON → Leave issuer/expiry/upload empty → Submit	Please complete all bystander fields is displayed on bottom of screen
CA-14	Bystander ON → All fields filled	Fill issuer, pick expiry, upload → Submit	Proceeds (no blocker)
CA-15	Medical Profile OFF → No consent needed	Leave "Add medical profile" OFF	No consent checkbox shown
CA-16	Medical Profile ON → Consent required	Turn ON → Leave consent unchecked → Submit	Please allow medical profile access or uncheck the profile is displayed on bottom of screen
CA-17	Successful User Account Creation	Fill all required + valid data → Choose "User" → Submit	Goes to MFA page to setup MFA. (If prompted to enter phone number enter +17155130373 and code 123456 because the SMS MFA does not work on the emulator)
CA-18	Successful Helper Account Creation	Same as above but choose "Helper"	Same as CA-17
CA-19	Email Already in Use	Use email already registered → Submit	Email already in use is displayed on bottom of screen
CA-20	Weak Password (Firebase)	Use password: 12345678(common weak)	Password is too weak is displayed on bottom of screen

CA-21	Email Verification Throttled	Trigger too-many-requests (multiple fast submits)	Too many verification requests. Please wait... is displayed on bottom of screen
CA-22	Cancel Button	Select I'll finish setup later	Navigates back to login
CA-23	Form Auto-Validate on Submit	Enter invalid data → Submit	All invalid fields highlighted immediately
CA-24	Input Formatters Work	Type letters in phone field	Letters not accepted (only numbers, -, (,), space)

E. Edit Account Tests

Test ID	Test Case	Steps	Expected Result
ED-01	Profile Data Pre-filled from Firestore	User has existing data	All entered fields populated: Name, Phone, EC Name/Phone, Allergies, Conditions, Medications
ED-02	Empty Fields Show as Blank (Not "null")	New user with no prior data	All text fields empty (not showing "null" or "undefined")
ED-03	Required Fields Validation	Leave Name or EC Name empty → Tap Save	Red "Required" error on Name and Emergency Contact Name
ED-04	Save Emergency Contact	Update EC Name + Phone → Save	Firestore emergency contact and phone update
ED-05	Save Medical Profile	Fill Allergies, Conditions, Medications → Save	All three fields saved
ED-06	Toggle SMS Consent	Turn ON/OFF "Allow SMS alerts"	Value saved
ED-07	Toggle Medical Access Consent	Turn ON/OFF "Allow responders to view my medical profile"	Value saved

ED-08	Toggle Location Consent (Future Feature)	Turn ON/OFF "Share my location in emergencies"	Value saved
ED-09	All Consents Saved Correctly	Toggle all three switches → Save	All three values saved
ED-10	Save Button Shows Loading State	Tap Save → network delay	Button text → "Saving...", spinner appears, button disabled
ED-11	Success Feedback	Save completes successfully	Bottom of screen displays Settings saved
ED-12	Medical Documents Navigation	Tap "Manage My Medical Documents" card	Navigates to Medical Documents Page
ED-13	Admin Uses Settings Page	Login as admin → go to Settings	Works identically — no restrictions
ED-14	Helper Uses Settings Page	Login as helper → go to Settings	Full editing allowed
ED-15	Regular User Uses Settings	Login as normal user	All fields editable and save correctly
ED-16	Data Persists After App Restart	Save profile → kill app → reopen → go to Settings	All saved values still present

Thank you for taking the time to test our product!

- Team 2