

Test Case ID	Functionality	Scenario	Steps to be Executed	Actual Result	Pass/Fail (Green/Red)	Comments
1	App	No unexpected crashes	No unexpected crashes when using the app	No unexpected crashes.		
2	App	App state maintained on call reception	Does receiving a call interrupt the state of the app?	Receiving a call does not interrupt the state of the app.		Android emulator lets you call the phone
3	App	App state maintained on Android menu interaction	Does interacting with a drop down Android menu interrupt the state of the app?	Interacting with the drop down menu did not interrupt the state of the app.		
4	App	App flow uninterrupted by WiFi off	No, receiving a notification does not interrupt the UI.	Turning off the WiFi results in the polls not loading.		
5	App	UI uninterrupted by notifications	Does receiving a notification interrupt the UI?	No, receiving a notification does not interrupt the UI.		
6	App	No console errors during runtime	Are there any errors in the console while running the app?	No, there are not errors in the console while running the app.		
7	App	All dependencies load properly	Are there any dependencies that do not load?	All dependencies loaded.		
8	App	App closes on home button click	Does clicking the home button result in the app closing?	The home button redirects the user to the home screen.		
9	App	Time and battery display consistently	Does the time and battery percentage still appear on the top of the screen while in the app?	The battery percentage and time still appear on the top of the screen while using the app.		
10	App	Background color consistent across pages	Does the background color stay consistent across all pages in the app?	The background color is consistent across all pages of the app.		
11	App	No console warnings during runtime	Are there any warnings in the console while running the app?	There are no warnings in the console while running the app.		
12	App	Frontend Firestore reading	Does the app read data from the Firestore database without errors?	There are no errors, and data from the database is read and used successfully.		
13	App	Frontend Firestore writing	Does the app write data to the Firestore database without errors?	There are no errors, and data in the database is modified successfully.		
14	Backend	Congress API accessed without errors	Does the backend access the Congress API without errors?	There are no errors, and data is successfully retrieved from the API.		
15	Backend	New poll documents added to database correctly	Does the backend add new poll documents to the database in the correct format?	The backend correctly adds new poll documents to the database. They are displayed correctly in the app, indicating that their format is correct.		
16	Backend	Backend checks for duplicate poll documents	Does the backend check before adding duplicate poll documents?	The ID of the poll is checked with those in the database, and those that match are updated instead of added.		
17	Backend	Filtering bills	Does the backend filter bills that are too short/long or irrelevant?	The backend does not apply any filters to the data it takes in, other than for duplicates. However, it does only take in laws, which boosts relevance.		
18	Backend	Backend Firestore access	Does the backend access Firebase's Firestore without errors?	Firestore is accessed with an API key without errors.		
19	Backend	Retrieving all bills/laws from a Congress	Does the backend successfully retrieve all laws from the specified Congress number? Run the get function for a Congress, and also run a get on the API itself. The second will return the total number of results. Compare this to the number of laws retrieved from the first get function.	The number of results in the same from the Congress API information and the backend's retrieval function.		
20	History	App stable when navigating to poll history	Navigating to the history of old polls does not crash the app	Navigating to the history of old polls loads older polls.		
21	History	Vote appears in history after poll closes	Does user vote appear in the vote history after the vote has closed?	User votes do not appear in the vote history after the vote has closed.		
22	History	Poll history graphs represent data accurately	Do the graphs on the Poll History page properly represent the data being provided?	The graphs in poll history accurately represent the data provided.		
23	History	Poll history contains only closed polls	Are the polls in poll History only closed polls?	The polls in history are only polls considered "closed" in Firebase.		
24	History	No overflow text in history scroller	Does text overflow in the History scroller?	Text does not overflow in the History scroller.		
25	History	Demographics in database match history page	Are the demographics in the database reflected accurately in the history page?	The demographics in the database are accurately reflected in the history page.		
26	History	Graph movement	Does clicking on any graphs cause the History screen text to overflow?	There are no overflow errors on the History Screen, including when clicking graphs		
27	Navigation	No crashes on quick navigation bar clicks	Does clicking quickly on bottoms on the navigation bar result in app crashes?	The app does not crash after quickly navigating using the nav bar.		
28	Navigation	Navigation bar routes correctly	Does the bottom navigation bar properly route to each page?	The bottom navigation properly routes to each page.		
29	Navigation	No back arrows on top left	Are no back arrows present on the top left of the screen?	The bottom navigation bar rendered properly.		
30	Navigation	Navigation bar animations function correctly	Do navigation bar animations function properly?	The icons turn slightly darker after touching them.		
31	Navigation	Screen load time	Does it take less than 2 seconds for a page to load after navigating to it?	The page loads in less than 2 seconds.		
32	Persistence	Vote data retained after logout/login	Log in and log out; Is vote data still retained?	Vote data is still associated with the user in the database regardless of local authentication state.		
33	Persistence	Settings data retained after logout/login	Log in, change settings, then log out; Is settings data still retained?	Settings data is still associated with the user in the database regardless of local authentication state.		
34	Persistence	No data loss on force stop	Does force stopping the app lead to loss of data?	Loss of local, not loss of database.		
35	Persistence	No data loss on app reopen	Does closing the app and reopening it result in lost data?	May vary depending on the amount of device RAM.		
36	Persistence	Settings saved after force close	Are the settings saved after force closing the app?	Settings are persisted in the database after force closing the app.		
37	Persistence	Data submitted to database on poll submission	Does clicking the submit button result in data in the database?	Vote data is immediately added to the Firestore database.		
38	Polls	Scrolling to end of polls	Scrolling to the end of the provided polls provides some indication of lack of polls	There is no direct indication, although the poll will remain displaying the "loading" text.		
39	Polls	Vote logged in Firebase	Does a vote get logged in Firebase?	The vote object appears in the Firestore database.		
40	Polls	No duplicate polls	Are there duplicate polls?	Duplicates were found.		
41	Polls	Votes assigned to correct polls	Does a vote get assigned to the correct poll?	A new vote object is added to the correct poll's vote array in the database.		
42	Polls	Poll unselection error-free	Can poll be unselected without errors?	No option to clear votes.		
43	Polls	Poll data stored locally without submission	Does poll data get stored locally when submit is not clicked on the poll?	No, submit must be clicked in order to save the poll data. No data is stored locally.		Data is lost
44	Polls	No repeated poll history pages	Do Poll History pages repeat when scrolling?	A single poll (the only one closed in the database) is continuously repeated when scrolling.		
45	Polls	Loading indication on poll scroll page	When scrolling in the poll scrolling page, does the page say loading whenever a poll is not present?	Yes, the page says loading when a poll is not present.		
46	Polls	Poll scroller contains only open polls	Are the polls in the poll scroller only open polls?	Yes, there are only open polls in the poll scroller page.		

47	Polls	Correct number of votes in database	Does the database have the correct number of votes that have been submitted?	The database successfully keep tracks of the number of votes on both the user and poll documents.	
48	Polls	All questions appear in scroller	Do all of the questions in the database eventually appear in the polls scroller?	Yes, all filtered polls eventually are shown in the the poll scroller.	
49	Polls	Confetti on poll vote submission	Click on the polls page and vote on a poll. Is there confetti from the top of the screen?	Confetti showed up.	
50	Polls	Poll ID appears in user's vote history	Vote on a poll. Does the poll ID appear in the user's vote history?	Yes, the poll ID appears in the user's vote history in the database.	
51	Polls	Duplicate voting on same poll prevented	Go to the poll screen. Can a user vote on the same poll twice?	Even if the user sees the same poll again, the internal logic double-checks the user's vote history, so there are no duplicate vote objects under the poll.	
52	Polls	Poll description length limits	Are only polls with descriptions within a specific length range displayed?	Yes, poll filtering conducted in Firebase was successful.	
53	Polls + History	Vertical scrolling stable	Scrolling vertically does not break the app	Vertical Scrolling functioned normally	
54	Polls + History	Horizontal scrolling stable	Scrolling horizontally does not break the app	Horizontal Scrolling had no effect on the app's animations	
55	Polls + History	Scroller state persists on navigation	Does leaving the scroller and coming back reset the state of the scroller?	The scroller state changes whenever the scroller is reaccessed	
56	Polls + History	No overflow errors on scrolling pages	Are there any overflow errors on the poll scroller page?	All boxes are controlled such that large text is contained	
57	Settings	Settings menu data changes accurately	Settings data is correct after selection.	Location, Birthday, Gender, and Race widgets work as expected. Selected demographics are displayed on the page.	
58	Settings	Disallowed age entry handled	Entering in an age not allowed by the app upon registering	All birthdays can be entered into the settings menu, including years beyond 2024 and years in which people would be under 13 years of age	
59	Settings	Allowed age entry handled	Entering an age that is allowed by the app upon registering	Since all birthdays can be entered, valid birthdays can be entered.	
60	Settings	Demographic settings reflected in database	Are the demographic settings properly reflected in the database?	The demographic data is properly reflected in the database after collected from the settings page.	
61	Settings	Settings saved after navigation	Are the settings saved after switching screens on the app?	No, settings are not saved after switching screens on the app BUT are saved in Firebase.	
61	Settings	Settings saved after exit	Are the setting saved after exiting the app?	Settings are saved in Firebase BUT not on the app.	
62	Settings	Settings update	If you change your settings after entering them once, do they update in Firebase?	Settings are updated in Firebase after changing in the app.	
63	Startup	App boots from app icon	Successful boot of the app after app icon is clicked	App starts up without errors.	
64	Startup	Welcome page opens if user not logged in	Does the app open the welcome page when it is launched, if the user is not logged in?	The app launches the welcome page if the user is not logged in.	
65	Startup	Scroller page opens if user logged in	Does the app open the poll scroller page when it is launched, if the user is logged in?	The poll scroller page is launched if the user is signed in.	
66	Welcome/Login	Cancelled login	Trying to login with Google, then cancelling the process, does not authenticate the user	User is not authenticated if they press the back button of the android tablet.	There isn't a way to cancel.
67	Welcome/Login	Gmail login	After logging in the prompted Gmail pop-up, logging in is successful.	Logging in is successful as it opens up the poll scroller app.	
68	Welcome/Login	Fake email login	After using a fake email to sign-up with the app, logging in is unsuccessful.	You cannot login if you use an email account no registered with Google.	
69	Welcome/Login	Account creation on second login	Going back to the home menu and attempting to log in a second time does not prompt the user to create another account	User is not prompted to create/login to another account after going back to the home screen.	
70	Welcome/Login	Random clicks on startup page stable	Clicking randomly on the startup page does not induce errors or crashes	There are no errors when randomly clicking on the start up page.	
71	Welcome/Login	No overflow errors on welcome page	Are there any overflow errors on the welcome page?	There is no overflow on the welcome page.	
72	Welcome/Login	Firebase authentication	Does the login page access Firebase's authentication service without errors?	With WiFi, the login page accesses Firebase's authentication service without errors.	