

Comprehensive Weather Forecaster - User Testing

Total Subjects: 4

User Testing Protocol:

The testing protocol used for testing this application was formal, task-based user testing. Subjects were given simple instructions to follow the tasks on the task sheet and articulate their thoughts as they navigated the application. The researcher (me) remained quiet and gave no further instructions pertaining to the operation of the application. The researcher's role was to record all feedback supplied by the subject.

Problem Discovery	What was done to fix it
Unsure how to check the weather overviews from all providers on the main screen. Subjects tried to search for the functionality, though the overviews are provided on the landing page.	The question asked was decided to be confusing and misleading.
Subjects could not work out how to change Metservice location. No user knew that there is a hardware button for application settings. Most subjects searched for configuration options within the Metservice screen.	Initially the problem was solved by providing a contextual soft button to access the configuration screen for Metservice. Only when in the Metservice screen would the user be able to modify location. In the end, a configuration page was included to set the location for all providers, available from the main screen.
Subjects found it difficult to remember weather details when comparing weather information across multiple providers. The action of changing providers is too hard.	A new screen was added to the application, showing all information from all providers. The information is categorised into weather types (i.e. temperature, wind, rain etc). In order to gracefully handle the volume of data on one screen, an accordian control collapses each category and allows the user to view a category of their choosing.
Subjects found it difficult to visualise forecasts over a number of days because of difficulty with changing days. When switching between days, subjects often forgot what the forecast was – meaning they had to go back and check again.	A navigation bar was added to each weather information screen (Met service screen, Weather Underground screen, Open Weather Map screen, and All Providers screen.). The navigation bar has just two buttons - one to see the next day's weather, and one to see the previous day's weather. When viewing weather information from a specific provider, the navigation bar will preserve the provider that you were viewing. Likewise, when viewing information from all providers, the navigation bar will maintain the 'all providers' view.
Subjects were confused by the new screen which shows all weather information from all providers. Subjects all wanted to see	Corresponding provider was added to each data field on the 'All Providers' screen.

the granular weather data, as well as the corresponding provider.	
Subjects were confused when they tried to assess the likelihood of snow in the coming days. The problem is that Weather Underground is the only provider that provides snow information.	It was decided to leave Weather Underground's snow information in the application, despite the absence of snow information from other providers. Though the application's primary aim is to provide more validated forecasts, the singular snow data has persisted for the sake of verbosity.
Subject wanted to easily view the current location that the application was pulling weather data for. Digging down into the Metservice information to view the location field seemed too laborious.	Current location (in terms of a textual place name) has been added to the Action Bar text for each activity in the application. The current location is now always visible.
Subject took some time to discover the hardware 'back' button, and thus found it difficult to navigate the application.	A soft 'back' button has been added to each activity, except the main screen (where the application starts from). This was achieved by simply defining a parent activity for each activity, and android automatically provides a 'back' button in the Action Bar.
Subject reported that they were overcome by the verbosity of data on each individual provider screen. The subject explicitly asked for a better means of showing this data, perhaps by categorisation.	This problem was tackled by the 'All Providers' screen, which provides data from all providers. The data is sensibly categorised into an accordion and allows for easy viewing. The decision was made to keep the verbose view for each provider, as this adds significant value to the application. The 'All Providers' screen excludes some information from each provider that the user may wish to view from time to time.