SOFTENG 350 Assignment 1

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Part 1:

1.

* Delete a bus stop: Remove the selected stop from the list of monitored bus stops
* Add a bus stop: Add the selected stop from the list of monitored bus stops
* Prioritise the list of bus stops: Disable the user to edit or delete the list of monitored bus stops while prioritising the bus stop list by dragging the accordions up and down
* Find a stop: Find a bus stop by the bus stop number, by the GPS location, or suggest nearby stops from an address
* Label a stop: Customise the name of the selected bus stop
* Add a bus route for a stop: Add a bus route for the monitored bus stop
* Delete a bus route for a stop: Delete a bus route for the monitored bus stop
* Display bus stops: Display the list of monitored bus stops
* Display bus status: Display the bus arrival status of the monitored bus stop

2.

* Visibility of system status

The system displays the list of arrival times of the selected bus routes and the list of bus stops monitored visually using the accordions. It also immediately displays the updates once the user finishes adding, deleting, or editing the stops or buses monitored.

The text shown that ‘No departures for your selected routes in the next two hours’ can be caused by actually no buses operating at the specific stop, or an empty list of selected bus routes. This can potentisally mislead the users.

However, this may be caused by an empty list of bus routes for that bus stop monitored. The system utilised the direct manipulation technique that uses visible objects and gives visible results. For example, by dragging up and down the bus stop accordions in the main screen, the user can prioritise the bus stops.

However, the meaning of the slider icon can be hard to interrupt. It is meant to enable the functionality mentioned and can likely to result in incorrect inferences.

I personally was confused by the slider icon, and only found the prioritising functionality once I started dragging the bus stop accordions.

The live status of a monitored individual bus and the bus stop position are presented visually on maps in some screens.

A progress bar is used to visually display that the system is updating new information.

The feedback of user actions is usually timely and accurate. However, thorough feedback is not provided for all user actions. For example, after pressing the slider icon of the main screen, there is only a small graphical change in the accordions of bus stops. Textual information can be displayed to inform the users instead.

Feedback: keep user informed about what goes on, show that input has been received

Provide status information

Features change as user carries out task

Feedback provided for all actions

Indicate progress in task performance

Identity cues system response vs. user’s goals

Show icons and other visual indicators

do not hide features

can show the most recent bus arriving at the main screen of the list of bus stops, instead of only

What incorrect inferences are most likely

* Match between system and the real world

The system displays the amount of stops away from current position for a monitored bus route.

12-hour clock and road numbers used.

The priority of the monitored bus stops is visualised by the stacking accordions. This is intuitive because humans tend to put the most important thing on the top of stack, and the least important at the bottom.

Workflow from a bus stop to the monitored bus routes like in real world.

Easy-to-understand vocabulary for general stakeholders, such as ‘stop’ for ‘bus stop’.

The system displays the most current position of the monitored bus on the map.

All the functionalities have titles that can be intuitively understood.

However, it’s hard to understand the use of the slider icon. It is used to prioritise bus stop priorities in the list by allowing the tabs being dragged up and down.

Speak the user’s language

Contains familiar terms and natural language .71

Speak the user’s language

Metaphors from the real world

Familiar user’s conceptual model

Use of user’s background knowledge

Learnable through natural, conceptual model

Follow real-world conventions

Screen representation matches non-computer

Encourage users to import pre-existing tasks

Identity cues between actions and user’s goals

Understand the user’s language

* User control and freedom

The system supports ‘backward’ buttons in most functionalities to abandon unwanted states.

The buttons are visible and easy to identify.

Undo and redo should be supported

Forgiveness: make actions reversible

Ability to undo prior commands

Clearly marked exits

Ability to re-order or cancel tasks

Modeless interaction

User control: allow user to initiate/control actions

Modelessness: allow users to do what they want

* Consistency and standards

Consistency: express same thing same way

Consistency

Consistency: same things look the same

Uniform command syntax

Conform to platform interface conventions

Consistent key definitions throughout

Universal commands: a few, generic commands

Show similar info at same place on each screen

* Error prevention

The system doesn’t warn the user when no bus routes is selected for a monitored bus stop. This could confuse the user that there are currently no bus services. A warning message should be shown.

The main screen gives warnings when no internet connection is established.

The bus map functionality prevents the users from selecting non-existing bus stops.

* Recognition rather than recall

See-and-point instead of remember-and-type

Make the repertoire of available actions salient

Seeing and pointing: objects and actions visible

All user needs accessible through the GUI

What features often missed and at what cost?

Provide lists of choices and picking from lists

Minimize the users’ memory load

Direct manipulation: visible objects, visible results

Easy or difficult to perform (execute) task?

Evoke goals in the user

Allow access to operations from other apps.

Clearly marked exits

Show icons and other visual indicators

Integrated with the rest of the desktop

* Flexibility and efficiency of use

The user may forget to select bus routes for the monitored bus stop which may reduce efficiency.

* Aesthetic and minimalist design
* Help users recognize, diagnose, and recover from errors
* Help and documentation

Not much official documentation for this app apart from the App Store.

There are some third-party reviews online.

The system should display hint messages when the user taps the holds onto an icon.

Only Some help messages exist when the user uses the app for the first time. They then disappear after that. Some instructions can be found on the app store, but they are not detailed enough, e.g. which buttons to press for certain functionalities.

Test Objectives:

the object of this test is to evaluate the usability of the AT METRO Track My Bus App, which is used to identify and monitor bus stops and the selected bus routes of these stops.