



## HCI 2017 – Assignment 1 Cover Sheet: Web User Interface Critique

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### Section 1.1 Personal Details

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### Section 1.3 Assessment: Tutor Use ONLY

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Total	<u>/69</u>
Comments	

[Type here]

**COMP3511**

**Human Computer Interaction**

2017 -- Semester 2

**Assignment 1**

**User Interface Critique**

Submitted 23 August 2017

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# Interface

The analysis target of this report is 'Sydney Trains' which belongs to public transportation category. 'Sydney Trains' is used to generate all possible routes to meet different types of customer needs which are to reach a destination from another place in minimal time. The clients that the website is facing are a wide range people, for instance, students, and working adults. The passengers who use 'Sydney Trains' intend to obtain a route to arrive at the destinations in minimal time with less spending. Therefore, the priority consideration of routing is less time-consumption and less money-consumption, which usually competitive to driving and other means of transportations. The routes provided by 'Sydney Trains' supposed to have a high accuracy of reality and real-time updates. Moreover, the website is also obligated to solve the problems about Sydney transportation met by the users who are not only experts but also the novice.

## Users

Samantha is a university student who intends to find the last train which allows her to arrive at the lecture on time so that she can increase sleeping time. Tom is a 30-year-old accountant who has to take bus and train to reach his company, and he wants to find a route with minimal intervals between different transportations. Bob is a 70-year-old senior citizen who intends to visit a general practitioner at the medical centre by public transports with minimal transfer and less walking. Jane is 30 years old American who has a plan to travel to Sydney for a week, and she prefers to take public transport from the airport to the hotel she booked. Ken is a 15-year-old teenager whose leg injured during a soccer competition, and he intends to find accessible buses with wheelchair access.

## Tasks

Samantha uses 'Sydney Trains' at night before going to lectures. She was staying up for several days to accomplish her assignments and wants to waste less time in the morning so that she can sleep 10 minutes more. She selects a route from these which the website

generated, which allows her to leave home as late as possible and attend the lecture on time.

Tom lives in the suburban area go to his company which locates in the city centre. He needs to take a train and transfer bus to reach his workplace. He intends to obtain an appropriate route which has minimal intervals between two types of transportation so that he can arrive at his company in minimal time before 9 am.

Bob is going to visit his general practitioner to make regular body examination. He wants to reach the medical centre by public transport alone. He cannot walk a long distance and cannot memorise complicate routes. He intends to gain a simple route to the medical centre with less walking from 'Sydney Trains'.

Jane plans to visit Sydney during her holidays. The first route is from the airport to the hotel. She browses the 'Sydney Trains' intend to gain some knowledge about the public transportation in Sydney, which includes the money consumption and time consumption and payment method and process of taking public transports.

Ken's leg was injured because of a soccer competition. And he still wants to go to the high school by himself. The only means of transportation is public transports. Thus, he uses 'Sydney trains' to find out the location of lift when he takes a train and estimates the approximate time he will spend.

## **Walkthrough & Analysis**

Bob is not familiar with the arrangement of transports network. Therefore, he searches the name of the medical centre and selects the route which meets his needs. Jane has little knowledge about Sydney carries, so she searches the name of the hotel from 'Sydney Trains' and chooses a route which meets her requirements. The reason for choosing these two is that senior citizens and tourists are not the largest combinations of customers but the specialist. For issues encountered by them are typical and representative. They have an amount of aspects in common. For instance, they are both inexperienced users. They would have difficulties that local commuters rarely

encountered. Therefore, senior citizens and tourists requirements and feedbacks are worth to analysis.

The basic arrangement of 'Sydney Trains' is well organised. On the homepage of the website, there is two type of searching engines. One is searching for train lines, and the other is searching for the destination which arranged in an apparent field. This effectiveness design provides users satisfying and encourages users to engage (Preece, Sharp and Rogers, 2015). 'Effectiveness' is a primary target and indicates the performance of functional design (Preece, Sharp and Rogers, 2015) (issue 1). Moreover, since searching for train lines is intended for experienced users and the other one is more likely to be used by a novice (Figure 1.2). The two different searching type offers users 'flexibility and efficiency' which is helpful (Preece, Sharp and Rogers, 2015) (issue 2). 'Flexibility and efficiency of use' states that for experienced users they provide 'accelerator' to increase the speed of using the system and the 'accelerator' can be ignored by the novice (Preece, Sharp and Rogers, 2015). Furthermore, the searching engine called 'search train timetable' (Figure 1.2) indicates that customers can select instead of typing train lines provides affordance (issue 3). Affordance means the nature of an object that instructs users by clues (Preece, Sharp and Rogers, 2015). 'Plan your trip' searching engine provides no searching history, which means users have to type the places every time that is not efficient to use and annoying users (Preece, Sharp and Rogers, 2015) (issue 4). The definition of 'efficiency' is the method that the product provided to help users to achieve the tasks (Preece, Sharp and Rogers, 2015). The 'Remember me' box has to be ticked each time whenever the user is searching for a route, which is also not efficient. Unlike other website, 'Sydney Trains' does not have 'sign in' button on the top bar (figure 1.3) and 'sign up' is in the middle of the page (figure 1.4), which is not appropriate because the consistency and standards state that users suppose to not be confused by different circumstances which refer to the same issue (Interaction design p404, issue 5). The arrows shown in Figure 1.3 provide no utility since there is no feedback after clicking the arrows (issue 6). 'Utility' states that the product should offer the correct functionality so that the users can achieve the tasks which arise in their mind (Preece, Sharp and Rogers, 2015). Feedback is the reaction on the action the user has done (Preece, Sharp and Rogers, 2015).

The section of 'live travel news' also have no access to the second interface which does not have utility, which always confusing users (issue 7). When the cursor moves the 'Service updates' field (Figure 1.6), the helpful feedback is provided (issue 8).

After searching for a destination, the website goes to the second interface and generated routes are shown on the sidebar (Figure 2.1). The process offers efficiency and learnability (issue 9). The learnability indicates that how simple the product can be learn to use (Preece, Sharp and Rogers, 2015). The details of the routes are hidden provide a pleasurable user experience which corresponds to the 'aesthetic and minimalist design' principle (issue 10). The 'aesthetic and minimalist design' shows that the interface should not contain unnecessary or irrelevant information and decrease relative visibility (Preece, Sharp and Rogers, 2015). The routes are shown on the maps with the station and walking logo which make the route matching between the system and the real world (Figure 2.2) (issue 11). 'Match between system and the real world' states that the system use expressions which familiar by users instead of the expressions used by the system, and information shows on the basis of the real world (Preece, Sharp and Rogers, 2015). A wheelchair showed on Figure 2.3 which matches the real world wheelchair to indicate the wheelchair access (Issue 12). For the users just arrive in Sydney, the payment method is important to know. When the novice click the fare (Figure 2.3), there is a sequence of help and documentation (Figure 2.5 and Figure 2.6) which achieve a high quality of user experience (issue 14). 'Help and documentation' mean that although the product should get rid of documentation, sometimes are essential, and the information should easy to obtain and offer users a sequence of steps to conduct (Preece, Sharp and Rogers, 2015).

The information of time is not obvious since there are no instructions to indicate the empty bar is for date and '23' and '10' are time (Figure 2.4). This issue may be confused users (issue 13). When the users want to return to the homepage, they cannot get access to the original page. Instead, the system returns to 'Transport' website which is not 'Sydney Trains' (Figure 2.7). This issue violates user control and freedom principle (issue 15). 'User control and freedom' says that when the users get access to a function by mistake, they can exit to the last interface by a single step (Preece, Sharp and Rogers, 2015).

The 'My Sydney trains' can only save the most recent searching result even if the 'Remember me' was chosen (Figure 2.8). This design does not provide utility, and the user experience of the design is boring and annoying (issue 17). Figure 2.9 is used to clear saved routes. The drawback of this design is there is no confirmation of clear all the data, which means there is no error prevention and not safe to use (Issue 18). 'Error prevention' states that a message used to prevent problems from happening (Preece, Sharp and Rogers, 2015). Furthermore, 'safety' is protecting the user from unexpected conditions (Preece, Sharp and Rogers, 2015).

## Accessibility

Figure 1.3 shows a button to accessibility page. For website accessibility, access keys instructions can be used to help physically disabled (Figure 3.2). Furthermore, the page 'station details' provide details about availability (Figure 3.1). It provides physically disabled information on whether the station has accessibility. For visually impaired, only the font can modify. Therefore, other disabilities can hardly use this website, and there are no instructions on accessing stations.

The design for disabled is not enough. Firstly, there are no other supports for other disabled except for visually impaired and physically handicapped. Secondly, although the size of the font can increase, some disabled do not have eyesight, which is useless and crude.

## Reference

Preece, J., Sharp, H. and Rogers, Y. (2015). *INTERACTION DESIGN - BEYOND HUMAN-COMPUTER INTERACTION 4E*. 5th ed. Chichester: Wiley.

## Appendix A

Design Principles	User Experience Goals	Usability Goals	Heuristics
Affordance	Satisfying	Effectiveness	Flexibility and efficiency of use
Feedback	Engaging	Efficiency	Consistency and standards
	Helpful	Utility	Aesthetic and minimalist design
	Annoying	Learnability	Match between system and the real world
	Confusing	Safety	Help and documentation
	Pleasure		User control and freedom
			Error prevention

## Appendix B

Reference	Issue Description	Principle	Type	Severity
Issue 1	Obvious searching engine	Effectiveness	+	1
Issue 2	Consider both novice and experienced users	Flexibility and efficiency of use	+	2
Issue 3	Provide selections	Affordance	+	3
Issue 4	No searching history provided	Efficiency	-	3
Issue 5	No sign in and sign up	Consistency and standards	-	3
Issue 6	No functionality of arrows	Utility	-	4
Issue 7	No access to the news	Utility/Feedback	-	4
Issue 8	Instance feedback	Feedback	+	2
Issue 9	Two steps obtain routes	Learnability/Efficiency	+	2



Issue 10	Hide routes details	Aesthetic and minimalist design	+	1
Issue 11	Show routes on map	Match between system and the real world	+	2
Issue 12	Wheelchair access	Match between system and the real world	+	2
Issue 13	Meaningless numbers	User Experience Goals	-	1
Issue 14	Introduction of Opal card	Help and documentation	+	3
Issue 15	Cannot return to homepage	User control and freedom	-	4
Issue 16	'Remember me' initialise every time	Efficiency	-	2
Issue 17	Only save the most recent search	User experience/Efficiency	-	3
Issue 18	No error prevention	Error prevention/Safety	-	2

## Screenshots

Figure 1.2

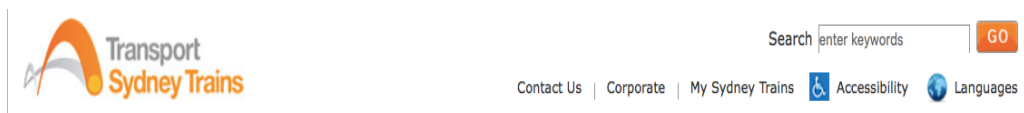


Figure 1.3

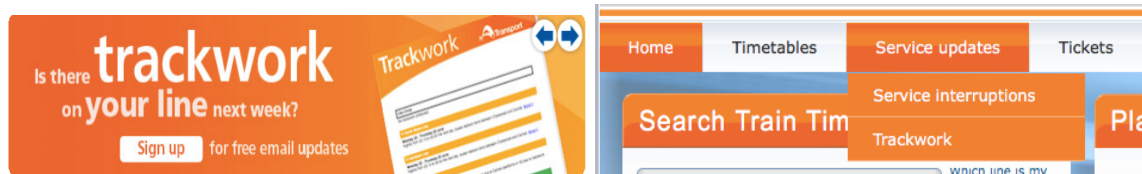


Figure 1.4

Figure 1.6

Live travel news

Current at 18:39

21

Monday August

T1 North Shore Line	Good service
T1 Northern Line	Good service
T1 Western Line	Good service
T2 Airport Line	Good service
T2 Inner West & South Line	Good service
T3 Bankstown Line	Good service
T4 Eastern Suburbs & Illawarra Line	Good service
T5 Cumberland Line	Good service
T6 Carlingford Line	Good service
T7 Olympic Park Line	Good service
Blue Mountains Line	Good service
Central Coast & Newcastle Line	Good service
South Coast Line	Good service
Southern Highlands Line	Good service
Hunter Line	Good service

Figure 1.5

Approx Opal fare

Done

Card type	Opal fare
Adult	\$16.81 (includes station access fee of \$13.80)
Child/Youth	\$13.90 (includes station access fee of \$12.40)
Senior/Pensioner	\$13.90 (includes station access fee of \$12.40)
Concession	\$13.90 (includes station access fee of \$12.40)

Opal is the electronic ticketing system used in Sydney and outer metro areas. Single Trip ticket prices are more expensive than using an Opal card.

These Opal fares are based on trip planning data and are provided as a guide only. In some instances, fares may differ from what Opal charges due to actual tap on/off time and location, off-peak discounts and Opal benefits such as weekly travel rewards. Registered Opal card users can view charges on their Opal activity statement.

[Find out more about Opal](#)

Figure 2.5

Trip Planner

Departures

Beta

From Sydney International Airport Station, Mascot

To InterContinental Sydney, Sydney

Leaving after 23:10, Today (Mon)

Options

Go

Favourite

Clear

Updated 21 Aug

Earlier

Left Mon 21 Aug	T2 ▶ 8	23:18 - 23:47 29min	\$16.81
Left Mon 21 Aug	T2 ▶ T4 ▶ 380 ▶ 3	23:23 - 00:04 * 41min *This trip arrives 22 Aug	\$16.96

Figure 2.1

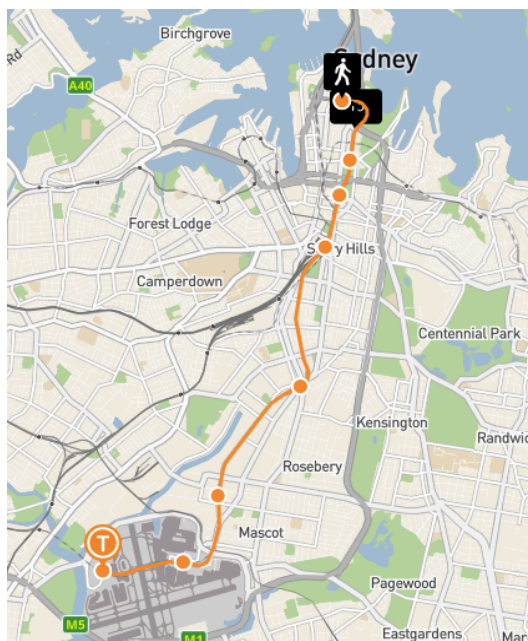


Figure 2.2

Left Mon 21 Aug	T2 ▶ 8	23:18 - 23:47 29min	\$16.81
-----------------	--------	---------------------	---------

Figure 2.3

Leaving after 23:10, 21 Aug (Mon) Options Go

Now Leaving Arriving

23 10

Favourite Clear

Figure 2.4

Home Tickets and Opal Opal



Opal is the smartcard ticketing system used to pay for travel on the Illawarra. Add value before you travel and tap on

Figure 2.6

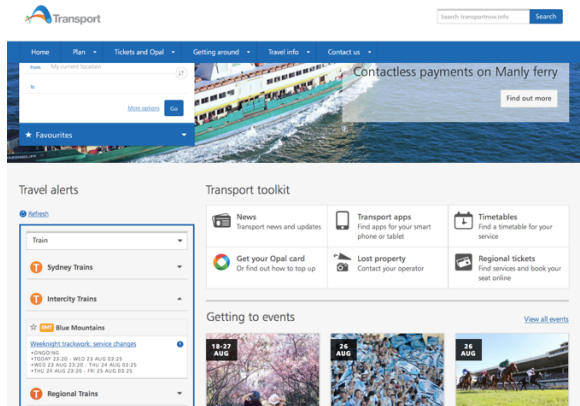


Figure 2.7

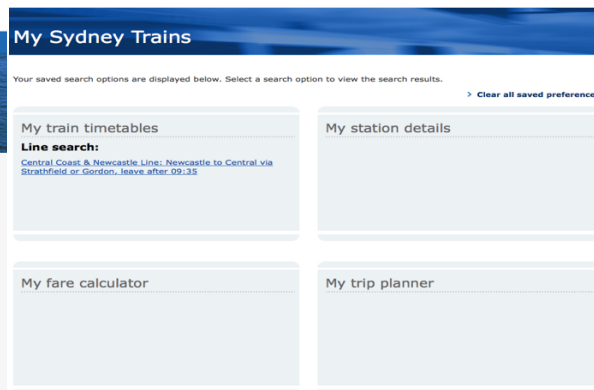


Figure 2.8

Clear all saved preferences

Figure 2.9

## Access keys

Access keys allow you be taken to a partic

- s = Skip navigation
- 1 = Sydney Trains homepage
- 2 = Site map
- 3 = Search (located on the top-right)
- 0 = Access key details

To use the access keys feature on our web

- Internet Explorer - press ALT key +
- Firefox - press ALT key + SHIFT ke

Please refer to the help section of your br

## Browser compatibility

This site has been tested with a number of

To check the version of your internet brow

- From the menu bar, select Help.
- From the menu options select About

## Font size

The text on this web site is relative, not fixed. If you are using a browser that still uses fixed text sizes, you may not see the text as it appears on this site (that suits you). Please note that significant

Depending on your browser, you can incre

Accessibility		
	Hearing loop	✗
	Platform tactile tiles	✓
	Portable boarding ramp	✓
	Wheelchair accessible toilet	✗
	Wheelchair accessible payphone	✗
	Wheelchair accessible carspace/s	✗

Figure 3.1

Figure 3.2