

User Evaluation Protocol

Ensure the participant has read the Information Sheet and has filled out the google form, consenting to the evaluation.

Briefly explain the product - a single-player game that simulates controlling the infrastructure of a university - and outline the structure of the evaluation: ~2 minutes

1. The participant will be given a set of tasks to complete within the game, describing any problems they come across.
2. The participant will then be given a short questionnaire to answer.

Tasks ~5 mins *(If the evaluation is being completed virtually, ensure the participants screen is being shared)*

1. Start the game from the menu
2. Pause and resume game (UR_PAUSE)
3. Mute and unmute the audio (FR_AUDIO_MUTE)
4. Place a lecture hall
5. Place an accommodation building
6. Place a recreational building
7. Place a building where students can eat
8. Move the lecture hall to a different location (UR_LOCATIONS_MOVE)
9. Remove the accommodation building (UR_LOCATIONS_REMOVE)
10. Complete any action to increase your satisfaction rating

Questionnaire ~ 5 mins

Rate from 1-5, 1 being strongly disagree, 5 being strongly agree

The System Usability Scale Standard Version		Strongly Disagree	1	2	3	4	Strongly Agree
			1	2	3	4	5
1	I think that I would like to use this system frequently.		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2	I found the system unnecessarily complex.		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	I thought the system was easy to use.		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4	I think that I would need the support of a technical person to be able to use this system.		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5	I found the various functions in this system were well integrated.		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6	I thought there was too much inconsistency in this system.		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7	I would imagine that most people would learn to use this system very quickly.		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8	I found the system very awkward to use.		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9	I felt very confident using the system.		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10	I needed to learn a lot of things before I could get going with this system.		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11. Was there anything you thought was missing?
12. Do you have any other comments/ feedback?

For questions 1-10, SUS score can be calculated by:

- 1. Adjusting scores by subtracting 1 from scores in odd numbered questions,**
- 2. Subtracting response score from 5 for even numbered questions,**
- 3. Adding all adjusted scores together,**
- 4. Multiplying total by 2.5.**

Interviewer Notes

Task Completion

Whenever users encounter a problem, the interviewer asks them to describe the problem and rate it using a 4-point scale.

- 1. Cosmetic Problem: This problem is making it slightly difficult to complete my task*
- 2. Minor Problem: This problem is making it difficult to complete my task*
- 3. Major Problem: This problem on the website is making it very difficult to complete my task*
- 4. Catastrophic Problem: This problem on the website makes my task impossible to complete*

Problem	Severity rating (1-4)	Frequency
UI has unaesthetic red lines	1	2
Buttons stuck together on Menu	1	2
The quit button on options page not necessary	1	1
Event text overlaps currency value	2	3
Weird spacing of building icons	2	1
Icons at the top too large	2	1
Crashed	4	(Fixed after ppt 1)
Events do not feedback their effect on satisfaction	2	3
The Sports Centre Image asset was not intuitive	1	1
Lots of events happening at once was overwhelming - RECOMMEND pause when event happens??	2	1
No feedback as to why satisfaction decreasing	3	2
Don't know how much each building costs	2	1

Unintuitive to write username at end	1	2
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Questionnaire

Question	Responses					
	Participant 1	Participant 2	Participant 3	Participant 4	Participant 5	Participant 6
1	2	5	4	5	5	5
2	1	1	1	2	1	1
3	3	5	5	4	5	3
4	1	2	1	1	2	1
5	5	4	4	4	3	4
6	4	1	4	2	2	1
7	5	5	5	5	4	5
8	4	3	4	4	3	2
9	3	5	5	4	4	5
10	2	1	1	1	2	1
11 Was there anything you thought was missing?	Tell the user how much each building costs.	Explanation for how satisfaction score changes throughout gameplay.	Explain how the satisfaction score changes.	Description for each type of building before being placed.	Need more event variety. Freshers' events popped up too much.	Feedback for what events do after you choose how to react.
12 Do you have any other comments/feedback?	UI design was not aesthetic/refined.	Liked ticks and crosses for where you can place buildings.	None	Liked the way the buildings were built.	Events kept overlapping the currency.	Liked the music a lot.
SUS score for each participant	65	90	80	80	77.5	90

Average SUS score: 80.42

Average excluding anomaly participant 1(Game fixed after participant 1's evaluation): 83.5