A Heuristic evaluation is a method by which a systems user interface can be evaluated with a set of usability principles. One such set of principles was defined by Jakob Nielson in his 1994 paper "Enhancing the Explanatory Power of Usability Heuristics". Below I attempt to apply the following principles derived from Nielsons heuristics to evaluate the usability of different aspects of the homepage on the University of Nottingham Blue Castle user interface:

- 1. Feedback
- 2. Simple and Natural Dialogue
- 3. Consistency
- 4. Effective Use of Shortcuts
- 5. Speaking the Users Language
- 6. Help and Documentation
- 7. Clearly Marked Exits
- 8. Minimisation of Users Memory Load
- 9. Prevention of Errors/ Implementation of Constructive Error Messages

Analysis of the Blue Castle Header:



In the Blue castle header, a user can access a variety of different functions that allow him to access and contextualise the site more easily. Moving from the top downward, you can see the most prominent feature of the header – the University logo. As well as contextualising the page as a branch of the main University of Nottingham Website (communicating this naturally and elegantly by implication), it also doubles up as a marked exit – clicking the icon will take you back to the University of Nottingham homepage. Though this is a universally adopted website format, it could be argued that this function is not clearly communicated to the user. Also the words "UK | China | Malaysia" could be easily misinterpreted as individual hyperlinks meaning that the clarity of this exit is somewhat compromised.

Below the Logo on the left of the screen is a set of buttons featuring a silhouette, a username and the Log off button. These allow the user to see general information about their course and student id and to Log off. However these symbols have a very limited efficacy in conveying their function to the user. For example, it's hard to notice the comma between the username and log off button meaning a user may assume all three are treated as a single prompt reading "<username> Logoff" and thus endure the unintended consequences of pressing the wrong button. Also, both the silhouette and the username buttons are not indicative of the information that is presented when the button is pressed - yes the users name, student ID, email address and course are associated with their username, but so is a lot of other information (e.g. year of degree) and thus it can be argued that the ambiguity afforded by these symbols is neither indicative of "Natural dialogue" nor "Speaking the users language". However, one minor feature of these buttons with major implications for design heuristics is that when the cursor is brought over the prompt it is underlined. Though these responses seem trivial in the sense that they're not required to create a functioning UI, the tactile response they generate allows the users inputs to feel effective letting them feel a sense of control over their actions - A user that feels in control will use the system with confidence and is less likely to become confused.

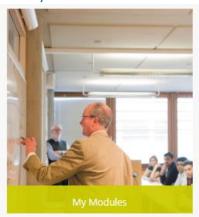
A variety of similar effective feedback systems are present throughout the rest of the site with similar animations triggering on similar functions. For example, the bottom

block of three buttons in the header will turn grey when moussed over. These buttons are used to filter the selections in the body of the site between those that fall in the category "Programme" or "Assessment" with the leftmost button being used to display all the options. On the homepage these buttons aren't particularly useful since there are only five options to choose from on the main page and thus filtering isn't required – It could even be argued that the presence of these buttons add visual clutter to the screen and confuse users (e.g. If a user is unaware how the system works and, while on the default unfiltered homepage sees the button "show all" implying that possible options are hidden. This scenario is further exacerbated by the fact that, despite highlighting in the presence of the mouse cursor, pressing the button would not effect a change on the site leading to further confusion).

The language used to present these functions is not conducive to user comprehension either – I've already mentioned problems with the "show all" button, but the idea of separating options based on whether they relate to a user's programme or a user's assessments may sound confusing since assessments are a subset of programmes. The symbols used to present each option are similarly confusing – a symbol of a house that is usually used to indicate a "home" function is associated with "show all" and a symbol of a pencil usually associated with the ability to edit a property is associated with "My Assessments". The only unambiguous usage of a symbol is the academic cap with its association with "My Programme", though as we have previously established this statement is ambiguous enough on its own. These buttons do not convey simple dialogue in a way most users could understand and their perfunctory function as effective shortcuts actively increases the user's memory load.

The features in the header are present throughout the site marking an area of consistency. This allows the user to navigate through the site using the functions in the header area as shortcuts – though some of these functions are less intuitive than others, they can, in the hands of a computer literate user, be used effectively.

Analysis of the Blue Castle Body:



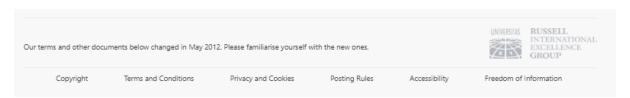




The body of the page is split up into five distinct options, each clearly labelled conveying simple and natural dialogue. What's more each description is prefixed by the word "my" in an attempt to use the users frame of reference – i.e. the users language. The colour coding also helps to separate modules directly related to the users assessments from more general options concerning the users course using the symbols in the header as a key. Again this helps to communicate efficiently with the user. The pictures associated with each option, as aesthetically pleasing as they are with their soft focus depictions of non-specific events in university life, have little to no relevance to the option they are supposed to describe – without the descriptions it would be impossible to tell one option apart from the other and thus they can only exist to confuse the user. However, the

presence of the images has the (perhaps unintended) side effect of enlarging the area in which a user can select a particular option. As dictated by Fitts's law, having a larger target width exponentially decreases the time a users takes to navigate toward the button. When the cursor is hovered over the buttons, a small graphic is overlaid with a symbol representative of the type of category the option resembles (e.g. programme based or assessment based). While this does produce some kinaesthetic feedback for the users actions, the information it displays represents a very confusing system of categorisation as I have mentioned above.

Analysis of the Blue Castle Footer:



Similarly to the features in the header, the footers content is conserved between pages on the site. However, to the average user, the functions in this area of the page are not particularly useful as they have little do to with the functions of the Blue Castle page itself – If anything, their presence may confuse users with the accessibility button being mistaken for a "help" button. Again, this is a clear example of when the designers hadn't used clear enough language to communicate this to the user. However, they do clearly segregate this section from the main body of the site using a faint grey line ensuring the majority of the users do not navigate this far down the page in the first place.