Cover Page

COMPSCI 345 / SOFTENG 350 Human-Computer Interaction

Assignment Three: Realizing a Design

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Note: To ensure a fair playing field for all students in the class the University of Auckland will not tolerate cheating or assisting others to cheat, and views cheating in coursework as a serious academic offence.

Student Declaration:

- I declare that this work is my own work and reflects my own learning.
- I declare that where work from other sources (including sources on the world-wide web) has been used, it has been properly acknowledged and referenced.
- I understand that my assessed work may be reviewed against electronic source material using computerised detection mechanisms.

Place this page in the front as the first page of your document that you are submitting to Canvas

Papr | SOFTENG 350 Assignment # 3 Design Document

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1 Walk-through

Students are learning about Data Computer Interaction; a new field about how to deal with data security, agency and privacy in their SOFTENG 346 paper. Their lecturer is using Facebook as an example to the class while having multiple 'case with structured question(s)' peer assignments for them to work through.

Their lecturer sets them an assessment on Papr (the learning content and management system) which has relevant information for them to review before answering each question. (fig. 1)

When the students "Submit" the answers are saved and they are taken back to their list of assessments. (fig. 2) After the deadline, their answers are sent to their peers to provide feedback on their answers. They can then give their peers feedback on their answers by clicking on assessments with "Feedback:" in the title. (fig. 2)

Students can give feedback on their peer's answers and can refresh their memory by viewing the relevant questions and case. (fig. 3) When they click "Submit" their feedback is saved and they are taken back to the list of assessments. (fig. 4)

Clicking on "Past" portion of the assessments allows them to see assessments they have previously done. (fig. 4) Click on "Data-mining Ethics" will allow them to see their submitted answers and their peer's feedback for them (provided it has been given, otherwise it will be blank). (fig. 5)

Clicking on "Assessments" or on the browser's back button will take them back to the list of assessments (fig. 2) where they can click on current assessments and edit their responses or feedback for their peers.

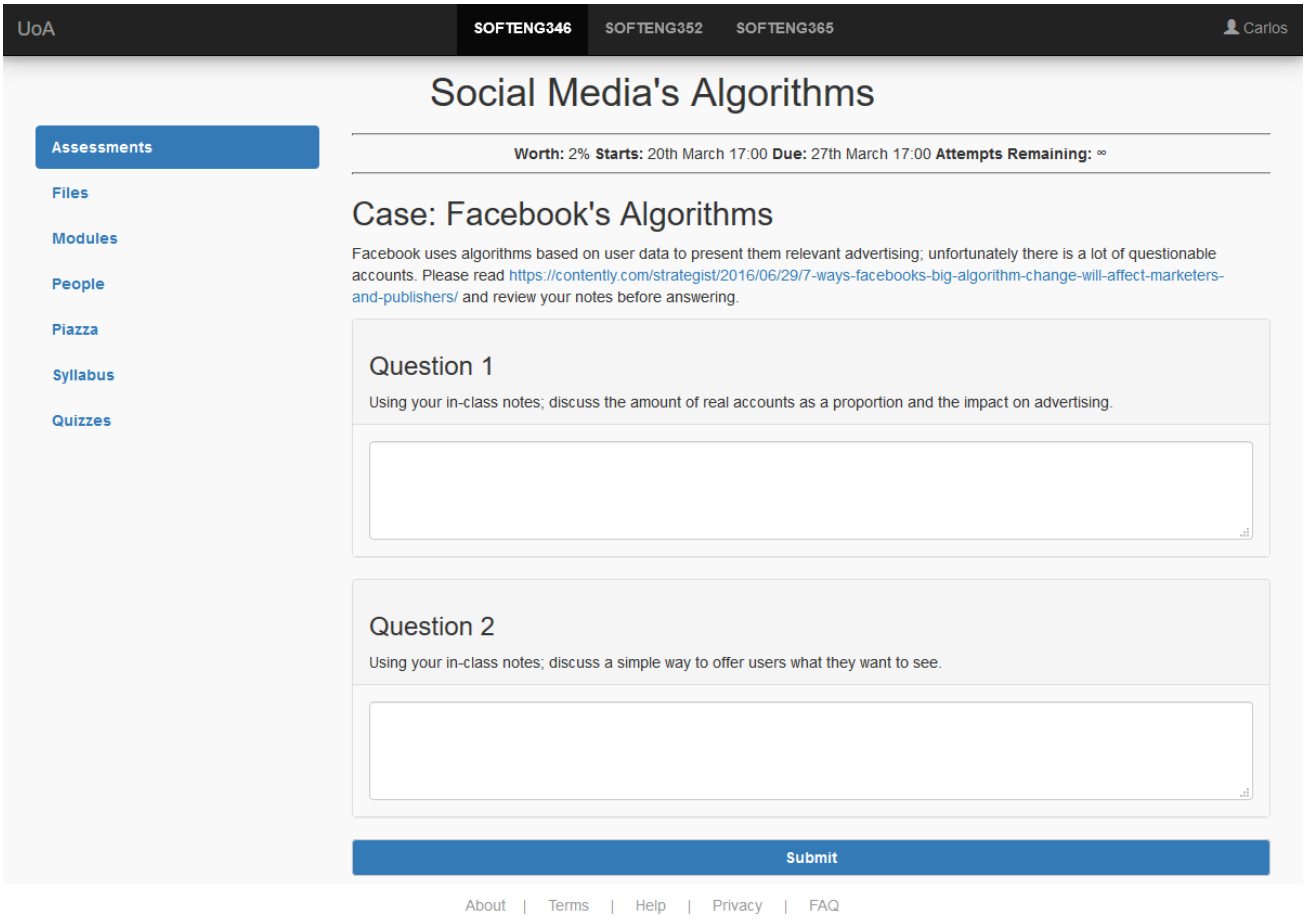

Figure 1: filling in the case with structured questions

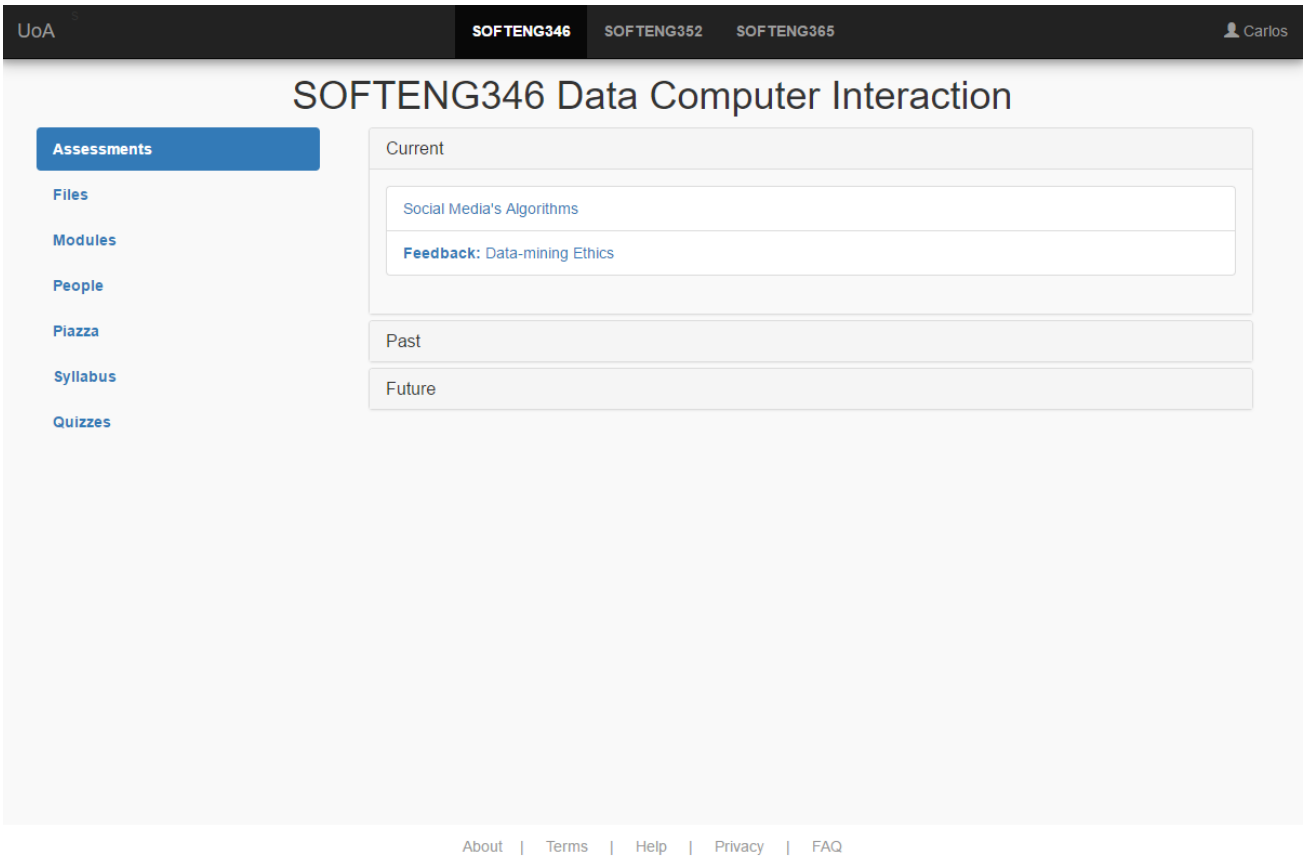

Figure 2: list of assignments; specifically the current ones

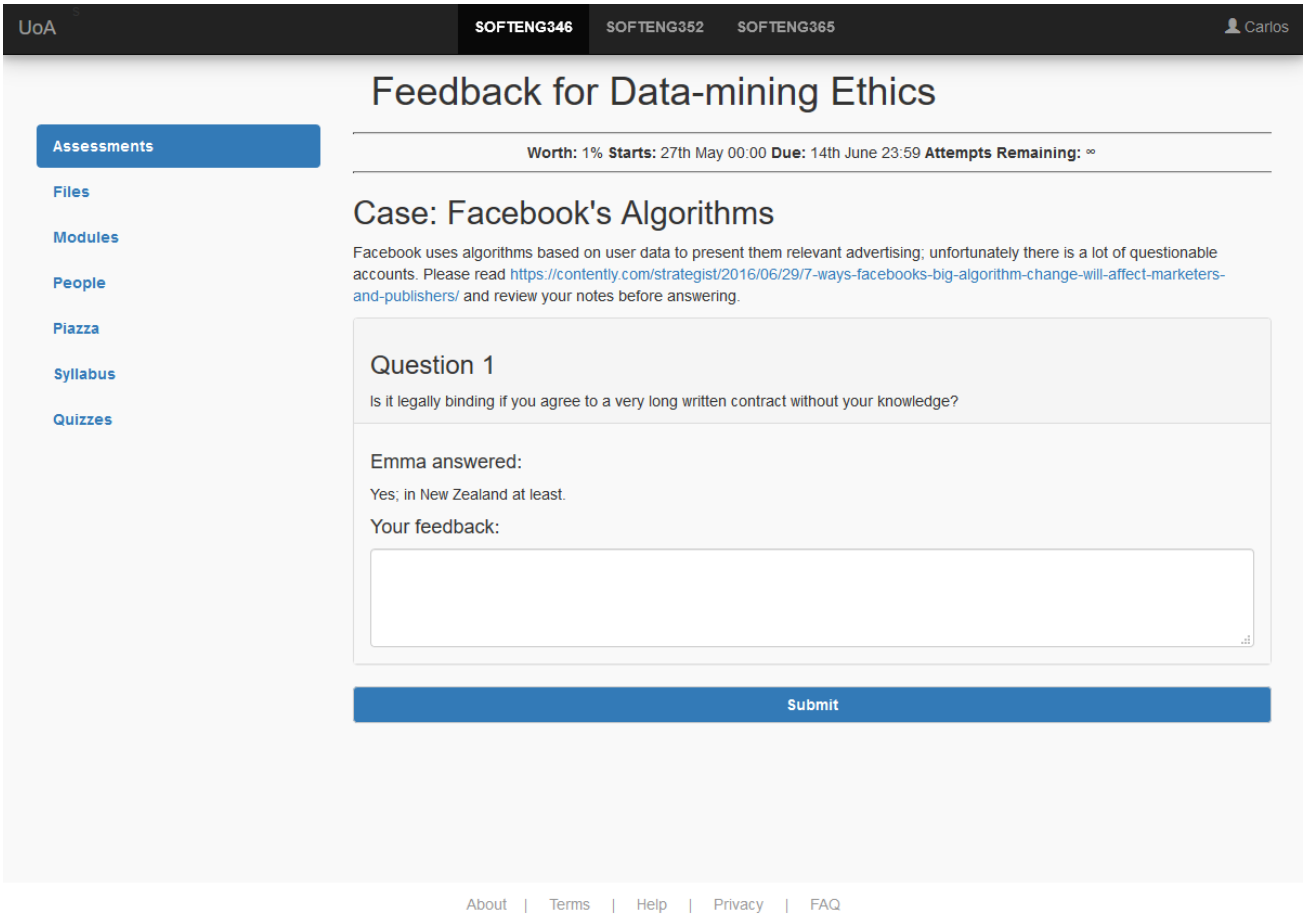

Figure 3: filling in feedback for another class peer

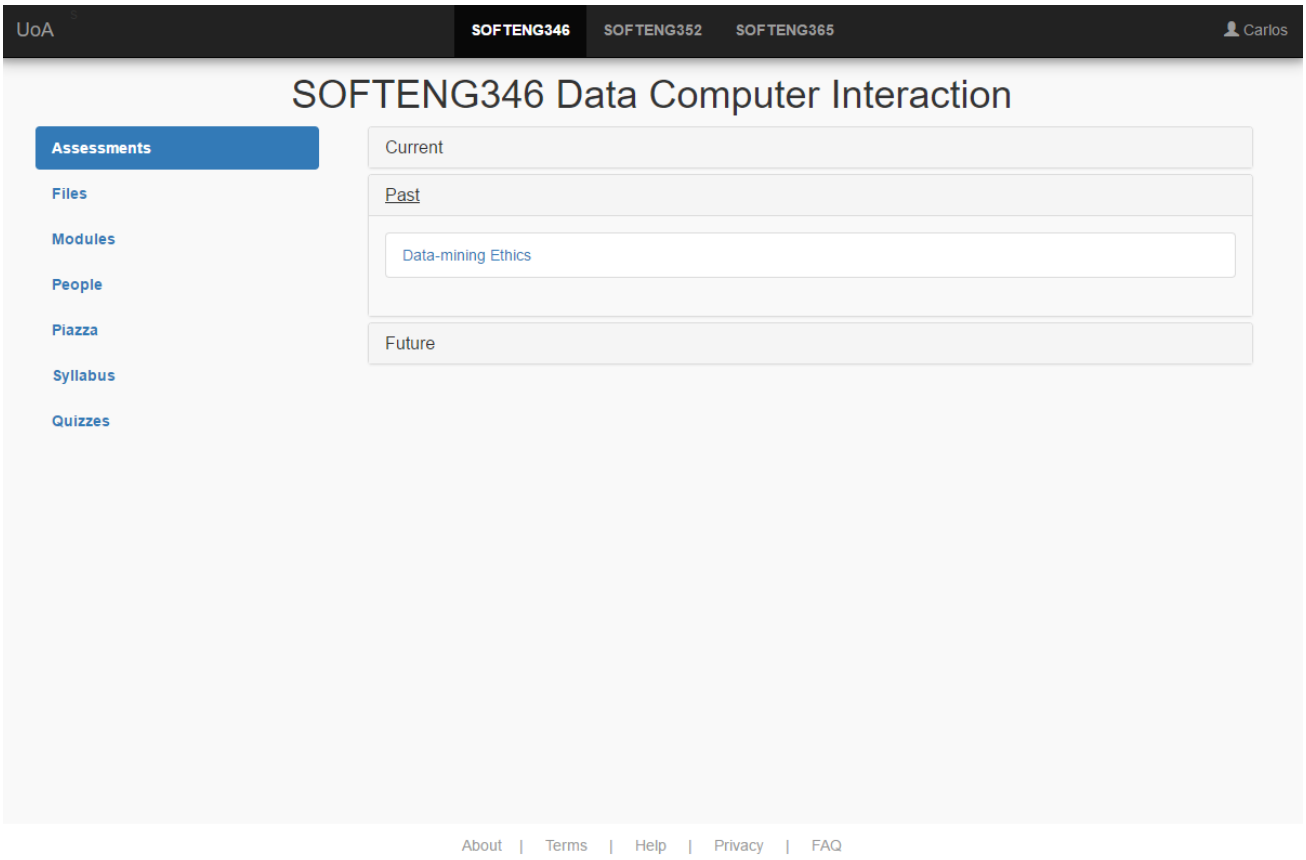

Figure 4: list of assignments; specifically the previously submitted ones

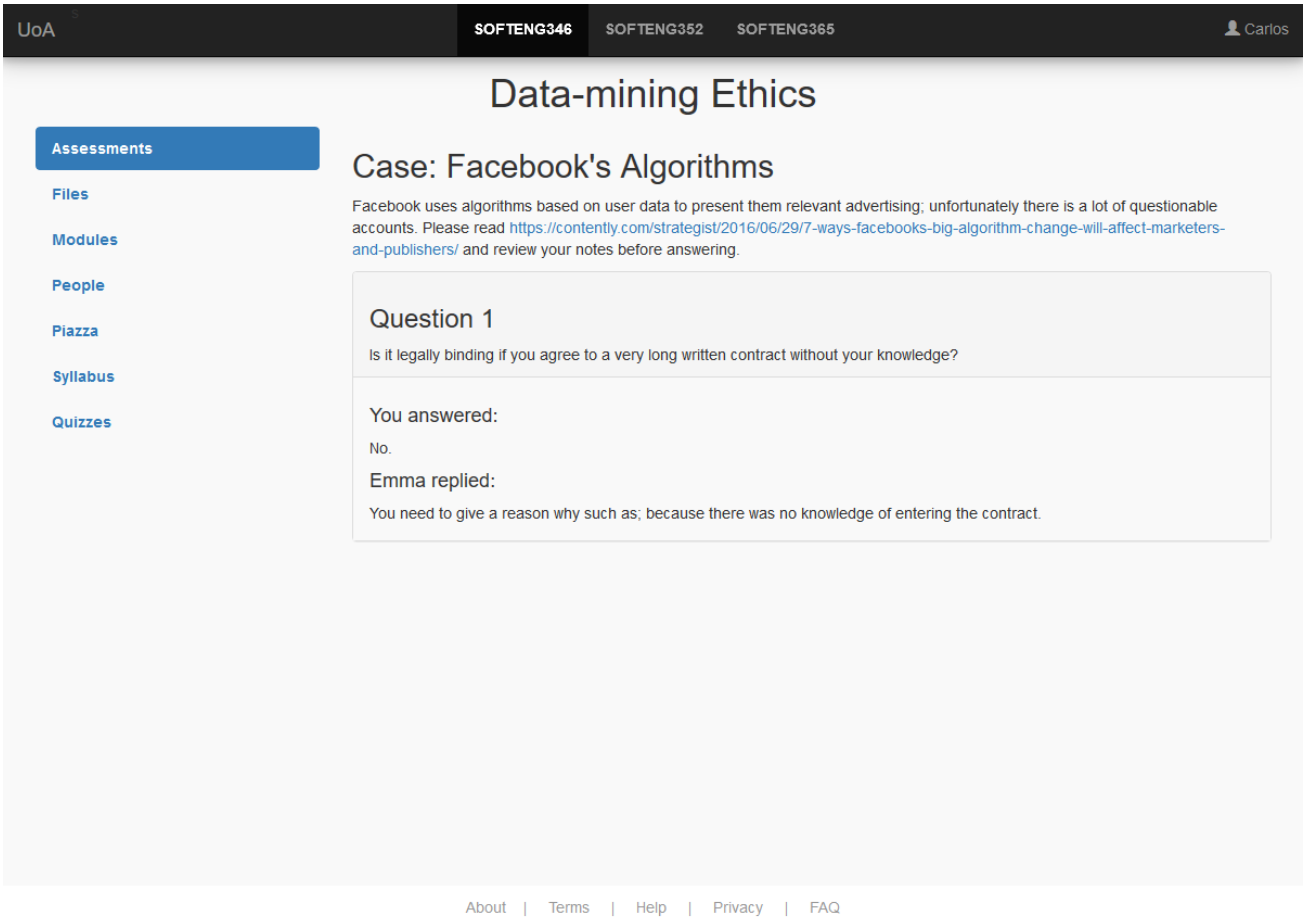

Figure 5: reviewing another peer's feedback to the user

Out of Scope

Due to time constraints, irrelevancy, the fact this is a prototype and technical limitations, there are some things which are out of scope. This fall into two categories:

UI not implemented

- WYSIWYG editors were not implemented because of the complexity of saving formatted text without a back-end and it's inappropriate for the short nature of the example questions.
- Other question types like checkboxes and MCQs were not implemented due to saving without a backend and it doesn't further illustrate the point of the prototype (it is possible).
- tooltips were not included as there are no features thought to be too complex or without labels to understand.
- A quickly dismissed or disappearing banner or alert to show answers or feedback being saved before redirection back to assessments (requires a back-end or a more complex prototype).
- Real-time use of two users to see feedback appearing after being given due to needing a back-end or becoming too complex for a prototype.

UI implemented

- Viewing other courses ("SE365" and "SE352")
- Viewing and modifying personal settings/profile page
- 'Home' button ("UoA").
- All of the footer links and pages
- Text boxes for feedback and answers can't be limited to only resizing vertically due to a bug in Bootstrap and the layout of the document.
- Viewing other categories for a course ("Files", "Modules", "People", "Piazza", "Syllabus", and "Quizzes")

2 Colour Scheme

The prototype uses a monochrome on grey-scale colour scheme as seen in fig. 7 on the next page.

The palette was kept simple for a formal look with the minimal use of the blue for it to add character and emphasise what it is used on while ensuring easy reading. Blue that is a little darker was also used for the same reasons. Blue being on the lower end of the spectrum has another benefit of being less straining on the eye.

High contrast was used to keep most of the text readable; however, the background is slightly grey to minimise strain on the eye. High contrast is also utilised between the navigation bar (navbar) and body of the website to distinguish them. Inverting the high contrast was used for buttons that have been selected to emphasise that fact. The heading text is specifically black so that (in combination with being large at the top of the page) it is at the top of the contrast hierarchy; users look at it first so they know where they are.

The low contrast was used between the navbar components and footer components to help hide them so they are less distracting. Low contrast was also used to separate boxes so there is a visually distinguishable difference without distracting.

3 Borders Scheme

Borders were done in three main ways; use of text justification, contrast (high, low or colour) or visible borderlines. Other ways of logically grouping items were prioritised to add character and reduce the visual confusion arising from a vast amount of complex borderlines and styles.

High contrast was used to logically group the header at the top of the page from the rest of it along with a drop shadow to 'raise' it above and further emphasise the difference. Low contrast was utilised between the main part of the page and the footer, the slight difference in background colour from light grey to white is just

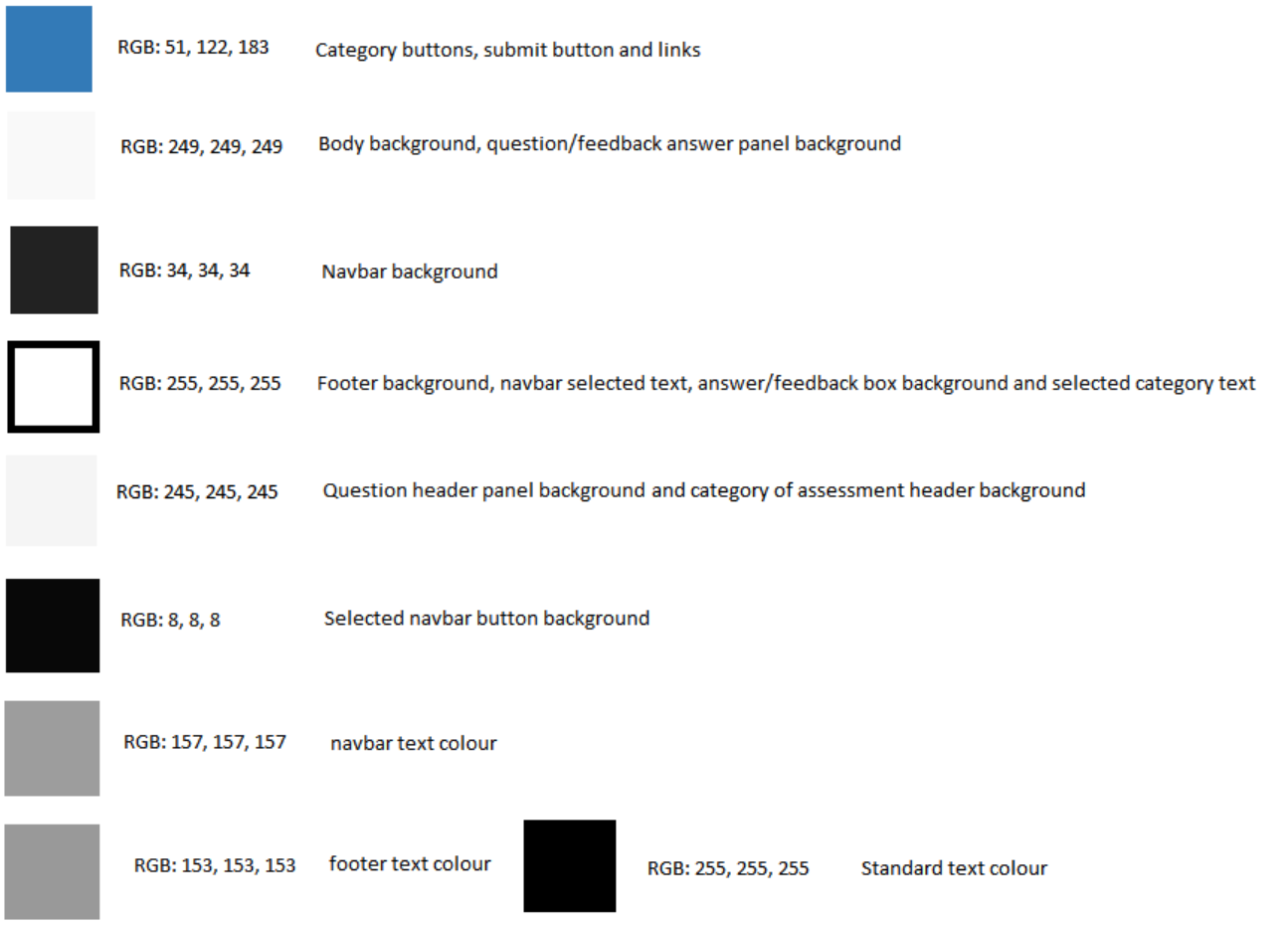

Figure 6: colour palette used for prototype

enough to logical group footer components from the rest of the document while not being distracting. Insertion of colour (the dark blue) logically grouped the categories of course content categories from the content in the main part of the page. Blue as "Submit" button backgrounds also put them in the general 'button' concept to the user (there is an ability to click/tap) just like the course content categories.

One of the simplest ways to logical group the items was by using justification of the items and of the text. Left justification was used along the course content categories and content to both separate them with respect to each other and for internal consistency (note the items in the content. The items in the content have the same left justification and width to group them. The page title was deliberately not justified.

4 Fonts Scheme

Font	Styling	Sample	Use
Arial	-	a quick brown fox jumps over the lazy dog,:.;?!/\()1234567890-`~_=+*<>{}[]@#$%^&	Standard
Arial	**Bolded**	**a quick brown fox jumps over the lazy dog,:.;?!/\()1234567890-`~_=+*<>{}[]@#$%^&**	**Emphasis**

Figure 7: font selection used for prototype

It is very important the user can read a lot in this system without strain as they could read a huge amount. Thus Arial was used throughout the prototype by letting all browsers use their default as it is the default for almost all the big browsers (it must be good enough for the experts at Google). Being a proportional font the speed and ease of reading is increased because users can distinguish the shape of whole words rather than having to read

individual letters.

Picking Arial means just using the browser's default so that allows the user to change the font when they change the default font in their browser if they prefer something else. Being a very popular font is available in almost every browser/OS combination and is default because it is so readable, easy on the eyes and modern.

Bold text was used to distinguishing smaller headings instead of using font size to avoid to keep the size differences obvious. Bold text was also used in button text to distinguish it as a button, the extra emphasis informs the user that it's not just any old text.

5 Resources Used

- Footer that stays at the bottom
  https://stackoverflow.com/questions/25671073/footer-below-content-but-not-floating-mid-air-if-not-enough-content
- Drop shadow below header
  https://www.w3schools.com/css/css3_shadows.asp

Bootstrap

- Buttons https://www.w3schools.com/Bootstrap/Bootstrap_buttons.asp
  Used for "Submit" buttons
- Glyphicons https://www.w3schools.com/Bootstrap/Bootstrap_glyphicons.asp
  Used for thumbs-up and person
- List Groups https://www.w3schools.com/Bootstrap/Bootstrap_list_groups.asp
  Used for list of assignments
- Panels https://www.w3schools.com/Bootstrap/Bootstrap_panels.asp
  Used for question/feedback boxes
- Collapse https://www.w3schools.com/Bootstrap/Bootstrap_collapse.asp
  Used for the collapsing categories of assessments
- Pills https://www.w3schools.com/Bootstrap/Bootstrap_tabs_pills.asp
  Used for the blue sidebar categories of course content
- Navigation Bar https://www.w3schools.com/Bootstrap/Bootstrap_navbar.asp
  Used for the top navigation bar
- Forms https://www.w3schools.com/Bootstrap/Bootstrap_forms.asp
  Used for the text entry boxes for answers/feedback
- Grid https://www.w3schools.com/Bootstrap/Bootstrap_grid_stacked_to_horizontal.asp
  Used for the responsive layout of the pills and main content