

Assignment 3

Question 1.

Functional requirements are conditions that the project or system **must** be met to be usable by the customer. These requirements are necessary for the system. We can think of these as the non-negotiable 'must-haves' of the system without which it can't be shipped to the customers. On the other hand, non-functional requirements decide how the system **should** accomplish those functional requirements. These are the 'nice-to-have', extra quality of life features without which the system still functions. (Barron Stone and Olivia Chiu Stone, <https://www.linkedin.com/learning/programming-foundations-object-oriented-design-3/defining-requirements?autoplay=true&u=2097252>)

Question 2.

Functional Requirements	Non-functional requirements
Change the email and mobile notifications to have custom timeframes instead of the default 2 days prior.	Show more statistics to see progress and performance after each assessment (quizzes, assignments, etc.)
Add a chat-like app instead of email to chat with peers so that we can communicate with peers who are not on other messaging apps like discord, messenger, or WhatsApp.	Add the ability to be able to show more than 20 assignments, quizzes, etc. on a single page.
Add your own events to the calendar inside D2L to make it more useful.	Show the group members on the assignment page itself if the assignment is in groups instead of having to go hunt for the list of members in some obscure corner of the course page.
Ability to add and remove links from the navigation bar to set it up to have a less cluttered look.	Add a "most visited" section at the top of the table of contents to make it easier to get to content items that are used again and again.
Update the tasks feature to be its own app instead of being inside the calendar where nobody notices it. Update the UI of the tasks app to be more user friendly in line with most modern tasking or to-do list apps.	Add the ability to bookmark items from the table of contents page instead of having to go through each item to bookmark them.
	Add the ability to download multiple course items instead of having to download each of them separately.
	Ability to add or remove widgets from the course home page (class progress, grades, updates, etc.).
	Add the ability to change the name of the courses or give them an alias.
	Add Dark theme for the entire website.
	Change the layout of the calendar.

Question 3.

Scalability is the concept of making systems that can perform in a similar manner, whether the business load increases or decreases. I believe scalability is a non-functional requirement. As stated above, for a system to have met its functional requirements, it **must** satisfy conditions that make it usable. These are the core features of the system. However, scalability refers to the availability, the performance, and the reliability of the system. These principles fall in the category of conditions that **should** be met by the system. They are not part of the core features of what the system must do to be usable or become the minimum viable product. (Tim Lord, [https://learn.bcit.ca/d2l/le/content/876287/viewContent/7898237/View\)s](https://learn.bcit.ca/d2l/le/content/876287/viewContent/7898237/View)s)

Question 4.

The requirements from my list that are scalable (these requirements have been highlighted in the table above):

- Ability to add your own calendar events.
- Ability to have a chat like app to communicate with peers who are not on other social media channels
- Ability to add or remove widgets from the home page
- Add the ability to change the name of the courses or give them aliases.
- Add dark theme to the whole website
- Change the layout of the calendar

These features focus on the customization for each user of the website. This means that each user would take up more space in the cloud to save their settings. This is a scalable requirement because the amount of storage required with the number of users would need to be increased or decreased. For example, adding your own events in the calendar and changing the layout would need the settings for them to be saved in the cloud for the LMS.