Bilkent University
Department of Computer Engineering

CS 319 - Object Oriented Software Engineering
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Section 1
Term Project

BilConnect

(Deliverable 4)
Team 3
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1. Design Goals

There are different design goals of BilConnect; however, two of them are the most important ones: usability and maintainability.

Usability

- The app should be easy to learn and use since BilConnect will be deployed into an already saturated market of second-hand sales with its competing feature being its exclusivity. If the app is frustrating to learn or use, frustration can drive the users away from the app to competitor apps.
- The process from making a post to completing a sale should be easy every step of the way. Especially messaging is a functionality that will be used repeatedly throughout the process. As such, its UI should be easy to learn and use.
- The tag system should be intuitive and primary/secondary tags should be obvious. Searching for a post should likewise be easy and without any frustrations.

Contradicting Concerns: The app will contain intra-personal messaging and some personal details which requires security, and is exclusive to the Bilkent student body which requires exclusivity. These concerns both contradict usability.
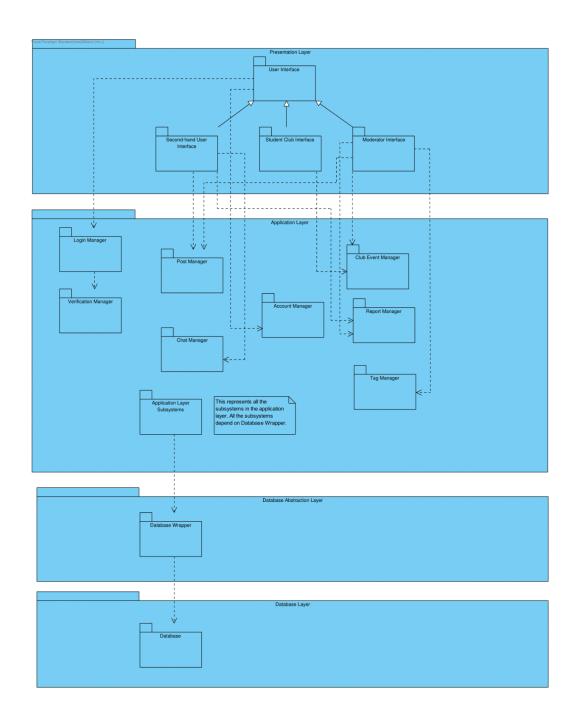
Maintainability

- The code should be maintainable. Considering the app will serve limited functionalities and will likely not grow in its functionalities, the biggest concern should be maintaining the app.
- The developer team of five people is relatively small for an app that has the potential of several thousand users. Especially considering the app includes several live-service functionalities such as chatting and posting, the site cannot function in a limited manner and requires all its functionalities. To accommodate that, maintenance should be fast.

Contradicting Concerns: If the app is successful to an extent that justifies having a bigger developer team, the priority of maintainability might get re-evaluated. In such an expansion, the addition of new functionalities might be considered bumping scalability and modifiability up in our priority list.

2. Subsystem Decomposition

The app has 4 subsystems: Presentation Layer, Application Layer, Database Abstraction Layer and Database Layer.

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