CS319
Object-Oriented Software Engineering

Deliverable 3

Section 1

Can Tücer (22203239)
Begüm Filiz Öz (22203470)
Orhun Ege Çelik (22202321)
Ruşen Ali Yılmaz (22203805)
Mehmet Emin Avşar (22202995)
Göktuğ Ozan Demirtaş (22202913)

Top 2 Design Goals with Possible Trade-offs

1. Usability

The main purpose of TOYS is to facilitate the jobs of Bilkent Tanıtım Ofisi (BTO) staff and applicants from high schools. Hence, a usable interface that allows quick and easy access to the main features is very important for our design. For instance, for a BTO employee volunteering to guide a tour and changing the weekly schedule, or for a high school applicant, applying for an individual tour must be easy to do. Moreover, the user interface should be easy to learn. The naming of different pages should be accurate, especially in the data analysis pages of the director, so that the users can access desired pages quickly. One possible tradeoff for usability would be rapid development. Making the system as user-friendly as possible extends the development time and makes implementing new functions and fixing bugs harder. Another trade-off would be portability. Since the usage of specific user interface elements and design choices is needed to further increase usability, incompatibilities with especially older browsers and smaller devices will be introduced. This will make the system less portable in favor of increasing the usability for other devices.

2. Functionality

TOYS should be the only platform BTO staff and prospective visitors use to meet all of their needs. Thus, it should provide more functionality than only allowing BTO staff to arrange tours. Any extra feature will make the app more desirable for the users as it removes the necessity of using multiple platforms concurrently. This may include data analysis, guide suggestions for advisors, or viewing the reviews of high school tour attendees. Every feature that may be required by any user role should be included within TOYS. This design goal has trade-offs with reliability and low cost. As the implementation of more functionality makes the system more complex, there would be a decrease in reliability. Similarly, the development and hosting of more functionality would require a longer development time together with better technology, increasing both the development and running costs of our project.

Subsystem Decomposition Diagram