

CENG350 Software Engineering Project Topic

Spring 2019-2020

Spurred by the current interest in “Smart METU Store”, this semester we will be working on the specification and architecture design of software for a particular smart store project, namely, Amazon’s “Amazon Go” project. You can find more information about the store in the Amazon Go app, including a tutorial on how to shop the store. After opening the Amazon Go app, tap More > Help. Please, watch the video <https://www.amazon.com/b?node=16008589011>

Amazon Go is a system that combines sensor fusion, computer vision and deep learning technologies, but you may assume that particular algorithms and methods can be used in a “black box” fashion. So you only need to understand what, rather than how, something is done using such technologies.

Although the Amazon Go system has been implemented based on Amazon frameworks and services your design can be at a higher level of abstraction, depending mainly on the technologies covered in our textbook, particularly, service-oriented architecture (SoA).

In terms of functionality, you need to consider a system that automates much of the purchase, checkout, and payment steps associated with a retail transaction. The Amazon Go app for iOS and Android links to their Amazon account and is the primary method of paying for items at the store, alongside cash at certain locations. The app is required to enter the store, which has turnstiles that scan a QR code generated by Amazon GO. Feel free to localize the detailed functionality of the project considering our own store.

You can also find more information from https://en.wikipedia.org/wiki/Amazon_Go . You are strongly recommended to look at the “References” section of this website to learn more about the system.

The delivery schedule for the SRS and the SDD is given in the course syllabus. For administrative details, please, follow the announcements by the TAs. Please, do not try to get in touch with Amazon personnel. If you need any information or clarification ask the course staff.