California State University San Bernardino School of Computer Science and Engineering

CSE 595 Independent Study Presentation

Date

June 16, 2016

Time

7:30 P.M.

Place

JB 359

Title

Mobile Application and Server Backend Development for a Commercial Service

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Abstract

In the current day of smartphones like iPhones and Androids, new businesses must create an online presence to reach their desired customers. Mobile applications are a perfect way to give a potential customer a full view of a business's service. The purpose of this Independent Study is to carefully develop a mobile application, and backend server for a promising commercial service. To compete with other services, popular technology companies of today were analyzed to create the appropriate server architecture for the commercial service. In addition, up to date technology protocols were implemented on the server and the mobile application to handle real-time communication. This includes the creation of a RESTful API that handles a MySQL database, the implementation of Websockets (Protocol RFC6455), the parsing and serialization of data in JSON, and token authentication. Also integrating third-party APIs into the server and mobile application were integral part of the project.