

Team 3: Initial Project Description

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Project Name: Line Hopper

Project synopsis: Allow students to order and pay for KU Dining menu items through a mobile application to reduce lines at on-campus dining locations.

Project Description: The motivation behind this project stems from the overall wait times at KU dining facilities, which leads to customer dissatisfaction and reduced sales for KU. This project is especially relevant now that KU dining has implemented declining balance meal plans. This will allow KU students to have greater freedom to use their dining plan at any of the dining facilities on campus, instead of primarily the dining halls. Several team members noticed that many students do not use facilities like the JayBreak Cafe because they don't have time to wait in line for their food to be made in between classes. By implementing a mobile application, students would be able to order while in their class, pay online, then pick up their food in between classes. This would lead to increased sales for KU and a more pleasant experience for KU students.

The end result for this project will be a mobile application prototype that would include the ability to order food items from specific KU dining facilities and pay for them remotely. Once we have proven the concept through our prototype, we could hand off our project to KU Dining's IT team, and let them integrate it into their current system.

Project Milestones:

First semester:

1. Collection of KU dining locations and prices (10/18/19)
2. Design mockups and user workflows (11/1/19)
3. Set up barebones backend AWS services with item retrieval and ordering (11/15/19)
4. Barebones front end with secure login, checkout, basic ordering (12/6/19)

Second Semester:

5. More fleshed out app with order history, dining location selection, visual UI elements, and completion notifications. (2/28/19)
6. Integration with a internet-enabled receipt printer for order creation (3/20/19)
7. Setup of secure communication channels back and forth from our servers to KU Dining's backend (4/24/19)

Budget:

Receipt Label Printer	\$50
LG 24' LED 720p Monitor	\$100
Intel Compute Stick	\$150
TOTAL	\$300

Work Plan: Our current plan is for Nathan Nichols and Daniel Zolotor to work on back end payment processing including connecting to Oracle Micros Symphony as well as overall project architecture. Alex Kunz and Thor Lyche will work on the front end development of the application as well as UI/user experience. Rob Nickel and Andre Kurait will be architecting and implementing the AWS backend for efficient and cost-effective ordering using a micro-service architecture.