Please provide the following information to be shared with on capstone information exchange platform:

1. **Project number**: S17-08

2. **Project title (as will appear on the poster)**: SmartCart

3. **Team members**: Athira Haridas, Christina Segerholm, Jaimie Swartz

4. **Adviser(s) name(s)**: Marco Gruteser

5. **Up to 10 keywords that will help to classify the project**:
   - internet of things
   - Android mobile application
   - navigation with RFID

6. **Project abstract (up to 200 words) to be shared with judges**:

   The SmartCart system enhances a customer’s shopping experience. The first major feature of system is a mobile application that allows customers to scan items into their virtual cart and view their running total before they reach the checkout line. The second feature enables customers to locate and navigate to the items they seek. The last feature tracks the occupancy of the store to help users avoid crowded times. These features synergize with each other, forming a robust, all-in-one shopping solution. The software components include Android Studio for the phone application and a combination of Flask, mongodb, and Amazon’s cloud for the server. Location tracking is implemented with radio frequency ID (RFID) technology to track the location and status of shopping carts. While some stores like Philips, Stop & Shop, and Amazon are developing technologies with similar goals, the SmartCart serves multiple purposes in a cost-effective and streamlined manner, thereby improving the user experience for both store employees and customers.