BEND BIKE SHOP

Functional Specification

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OVERVIEW:

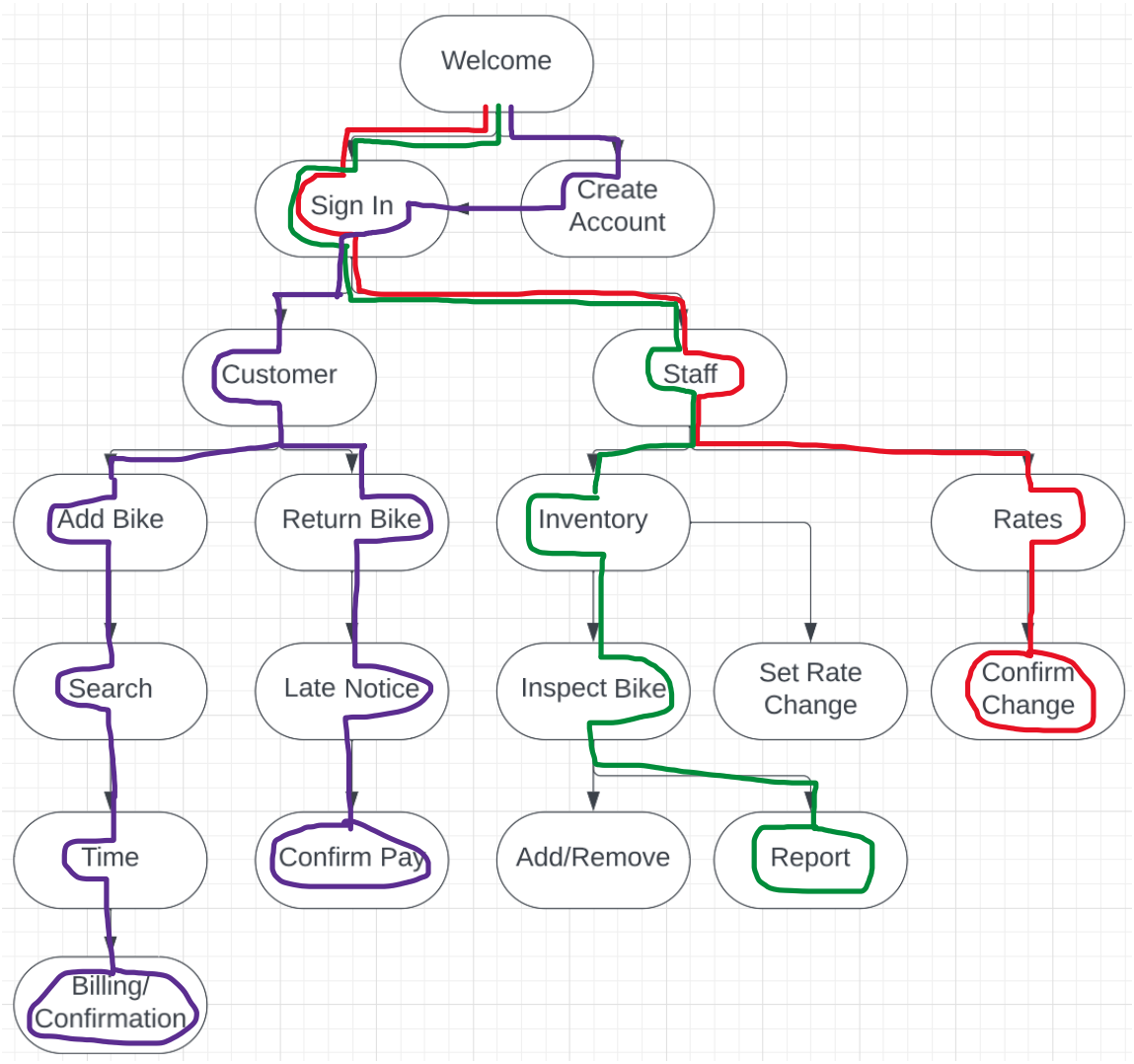
Bend Bike Shop is looking to have a bike rental system implemented. Customers can pre-pay for bike rentals using their web-based system or they can use kiosk stations to rent a bike. Both systems will have the same functions. Employees will have access to the system for management purposes.

SCENARIOS:

1. **Cindy the Customer:** Cindy is a college student in her mid 20s. She usually drives to campus from her apartment. However, recently parking has become limited and so it can be troublesome to find an available parking spot before her first class starts. Even the designated carpool spots are always filled up! She has a friend named Tim that she vents to about the parking situation. He proposes that she rides a bike to class seeing that she lives relatively close to the campus. What a great idea! But she doesn't have the space in her apartment to store a bike. That's when she finds out about Bend Bike Shop. They offer affordable rates, and their system is easy to use with kiosks conveniently placed near her home and the campus. She goes online, makes an account, and starts looking at the available bikes. She finds one she likes, inputs how many hours she'll need it that day, and puts in her credit card information. Before class she gets the bike, she is renting and goes to class. After class she returns the bike using the kiosk and her credit card is charged.
2. **Eddy the Employee:** Eddy is an employee working for Manny at the Bend Bike Shop. He goes into work, signs onto his computer, and sees that a bike was recently returned and is ready for inspection. He gets the bike and lazily looks over the bike. He reports that the bike is still in good condition. He then puts back the bike and waits for the next notification. On his down time he plays solitaire and searches indeed for a new job.
3. **Manny the Manager:** Manny is a co-manager for Bend Bike Shop with the original owner Mr. Ridealot. So far, he really enjoys his position. It pays well and with this new automated system half his job is already being done for him. Manny is a little more tech savvy than Ridealot so he spend a lot of his time trying to teach him how to use the new

system (it's how he landed his promotion). Ridealot is trying to change the rates of the bike rentals but is having trouble so Manny comes in to help. So far, Ridealot has only made It past the sign in screen and is on the Manager interface. Manny directs him to the rate change page where he can then input the new rate. The rate is being lowered now that it is the end of summer and school is starting. He hits submit and Manny then wait for anymore calls for help from Ridealot while he looks over inventory.

UX FLOWCHART:

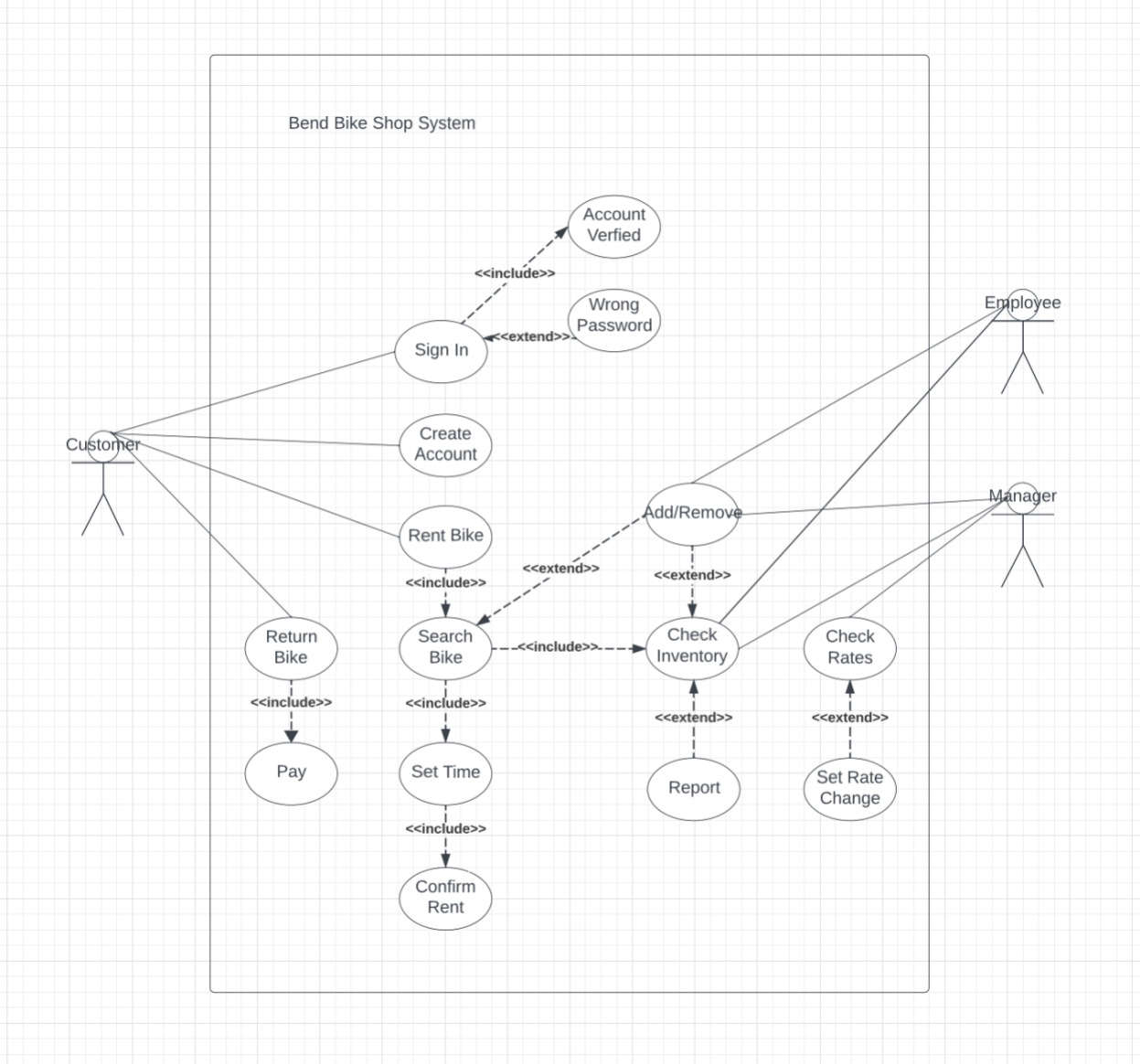


NON-GOALS:

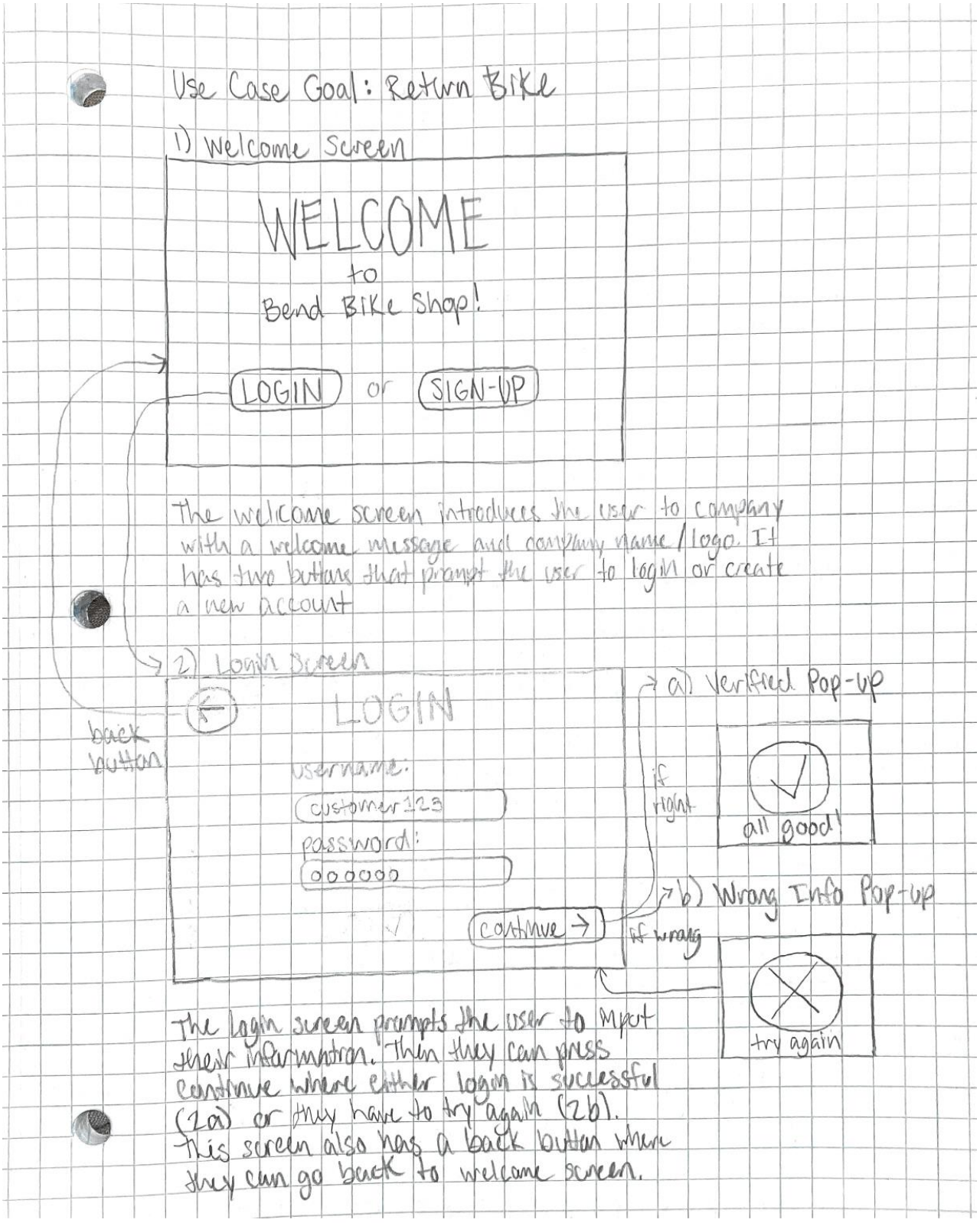
Other features that were discussed but will NOT be included are as follows:

- Other forms of payment such as cash, check, cryptocurrency, etc.
- Physical tracking implementation for theft prevention
- Maximum range from kiosk (GPS tracking)

USE CASE DIAGRAM:



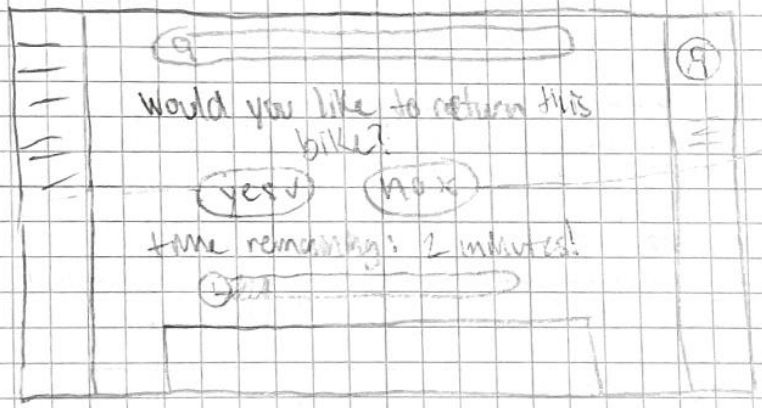
SCREEN SKETCHES:



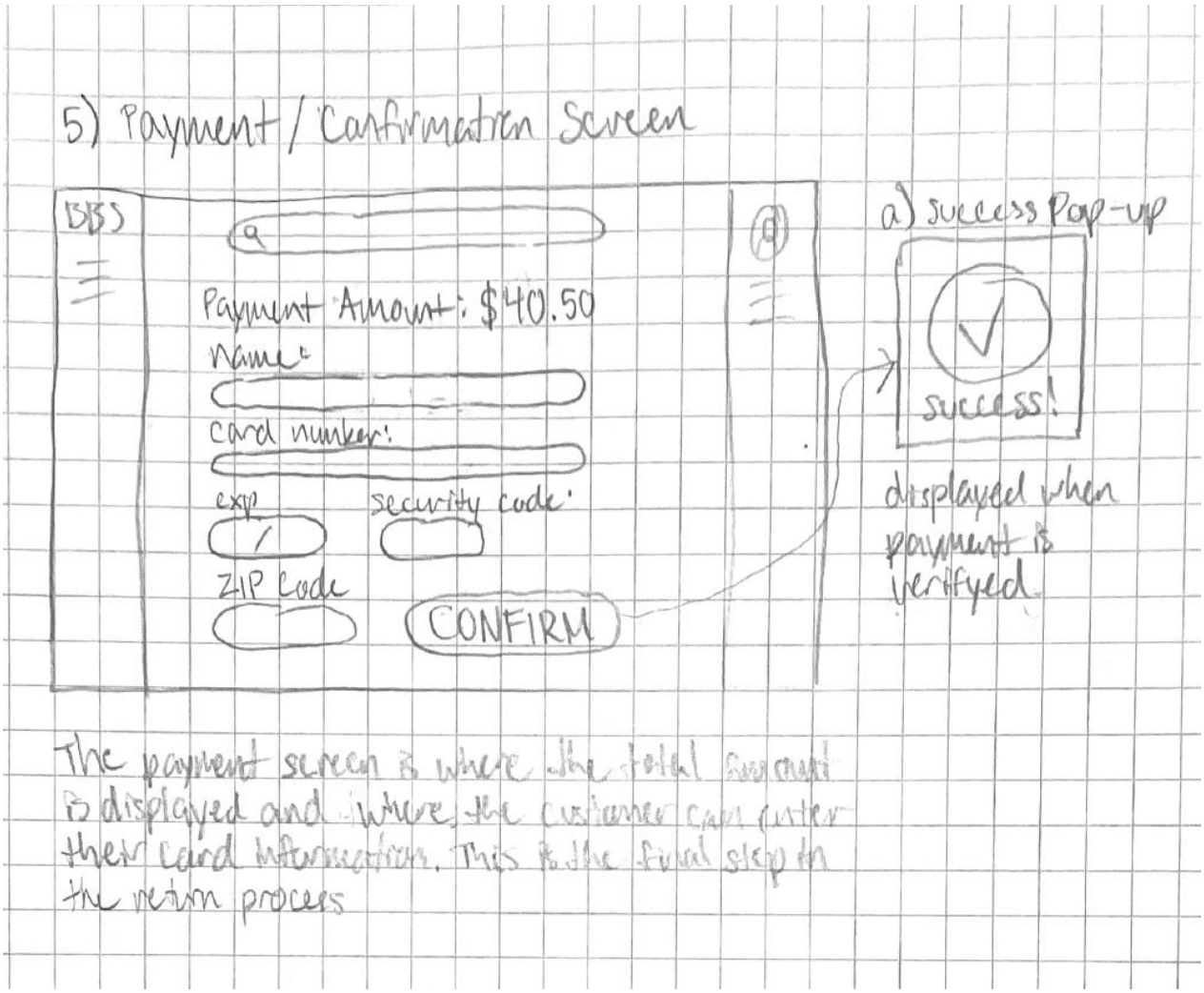
3) Customer Screen

The customer screen acts as the main hub for current/returning customers. It displays a search bar, navigation menu, profile section, and two main buttons to rent a bike or return one.

4) Return Screen



The return screen prompts the user to return the bike. Pressing "no" will return home and pressing yes will navigate to the payment screen. The screen also shows more info on the bike such as time remaining and a picture of the bike.



The payment screen is where the total amount is displayed and where the customer can enter their card information. This is the final step in the return process

USE CASES:

Employee Reports Bike(s)

Title	As an Employee I want to Report a Bike so that I the bike's condition is accurately conveyed on the system
Primary Actor	Employee
Stakeholders & Interest	Employee wants to report the condition of a returned bike. Customers wish to see the condition of a bike before they rent one. Mangers wish to see the condition of a bike before they adjust the bike's rental rates.
Preconditions	Employee accesses the store's online bike reservation system and has inspected a returned bike.
Postconditions	Employee updated bike condition.
Main Success Scenario	1. Employee logs into system. 2. Employee Selects Bike(s). 3. Customer Reports Bike.
Extensions	1.1 Employee logs in successfully. 1.2 Employee used incorrect username/password. 2.2 Employee abandons report 3.1 Employee Reports Bike. 3.2 Employee abandons report
Special Requirements	None.
Technology & Variation List	How will the system store report details? Will a character limit on reports be enstated? How can the Employee Report a Bike when the system is offline?
Frequency	Occurs once after a bike rental is returned to the shop.
Open Issues	If a bike was never returned, should that be listed in the report?