Functional Specifications

OSU Cascades | [Company address]

PROject b.7.2

Ceccacci, Devon

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**Overview**

The Bike Shop is a bike rental shop located in Bend Oregon. The Bike Shop is currently experiencing a rapid growth in its business due to an increase in tourism and they are in need of a web-based software system that can help customers reserve and pre-pay for bikes both online and at their shop location.

**Scenarios**

User 1: Customer

Marka Ragnos, Part 1

Marka Ragnos is someone that you might call a “health nut”. He loves to stay fit! Riding bikes around town is one of his favorite cardio workouts. Marka is planning on taking a vacation to Bend Oregon, but he is worried that he won’t be able to keep up his exercise routine. Luckily for him, while he was researching what to do in Bend, he discovered that he could rent a bike at The Bike Shop.

Marka visits The Bike Shop’s website where he is greeted with a stylish homepage, filled with pictures of smiling bicyclists riding through the streets of Bend Oregon. “That could be me!”, said Marka excitedly. He quickly pressed the bike rental link, bringing him to a page that listed all types of bikes. Marka selected the style of bike that’s a little flashy, Marka likes to show off a little. After pressing “add to cart”, the message “Bike added to shopping cart” popped up on a little window on screen. He pressed the little X at the corner of the little window, then went to the carts page and hit check out. He was greeted with an option to sign in or create a new account. Since its Marka’s first time renting a bike from The Bike Shop, he pressed “create a new account.” A forum that asked for his name, email, address, phone number, and a password pop up on screen. After entering his personal information, he pressed confirm and was sent to an order form page. After putting in his card information into the form. “ALL DONE!”, Marka said enthusiastically, closing his browser. What Marka did not know at the time is that you must press confirm before any transaction is completed!

Marka Ragnos, Part 2

Marka Ragnos arrived in Bend the night before, and after having his morning cup of espresso, he went down eagerly to The Bike Shop to pick up the bike that he ordered online. When he arrived at the shop, he went and found an employee. “Excuse me”, said Marka trying to grab the employee’s attention. “I rented a bike off of the website a week ago and I am here to pick it up”, Marka proclaimed. “Aww well welcome to The Bike Shop! If you head over to one of those kiosks at the front of the store you can sign in and request the bike to be brought out” said the employee warmly. Marka went over to the kiosk. He first saw a homepage, not too different from the one that he saw online, but now there was an option on screen for requesting an ordered bike. He pressed the button and was taken to a sign in page. After signing into his account using his email address and password, a new screen came up, “No orders on history”. “Oh No!”, thought Marka. “Thinking back, I totally forgot to hit confirm after putting in my card information!” Marka thought embarrassingly to himself.

Not to be defeated by his mistake, Marka clicked the return to homepage button and was taken back to the home screen that greeted him originally. He selected the option for renting a bike, where he happily saw on the screen that came up, that his fancy “look at me” bike was still for rent! “YIPPY!” Marka shouted internally with glee. He added the bike to his cart and hit check out. Unlike the online, Marka wasn’t taken directly to the order from screen, and instead was taken to a new page that looks like a waiver form. Marka quickly checked the read and understood box, signed his name with his finger on the screen, and hit confirm. An order form appeared on the screen that showed the bike that he wanted and the price. He hit confirm again, which brought him to a transaction page that requested payment. On the kiosk the card readers lights begin to pulse. Marka slide his card, then signed his name on the screen prompt that popped up. Afterwards he hit confirm order. “I can’t wait to see his beauty!” Mark thought, feeling excited ones again.

User 2: Employee

Jemma is a poor college student, enrolled in a computer science program at Oregon State University Cascades. To help pay her way through college, she has taken a part-time job at the local bike shop called The Bike Shop. Jemma loves her job since she gets to hang out in the back of the shop and repair damaged bikes. She dreams one day is to design the first commercial hover bike. One of her other duties is to bring up bikes that customers order to the front of the store. At one point, she was forced to constantly run back and forth from the front of the store to the back to retrieve bikes for customers, but ever since they installed the new Kiosks, she now gets alerts for when a bike is needed up front. This gives her plenty of time to fix up the damaged bikes so that they too can be rented.

Jemma has a little computer pad with her in the back. It’s pretty handy since it will make a sound when a bike is requested up front, and wouldn’t you know it, a bike request has just come in! The computer pad starts to make a chirping sound, signaling that a request for a bike has been made and its waiting to be filled. Jemma picks up the pad where she sees a notification, “One new request”. She taps the screen which stops the chirping and takes her to a page that shows what bikes are being requested, how many and for whom. “Marka Ragnos hu? And they want the Fancy 3000 hu?” Jemma takes the pad and goes over to where the bike is located. She takes down the bike and brings it out to the front. There she saw a customer waiting at the spot designated for pickups. The customer, who seemed to be overly excited, locked eyes with the bike as soon as it made it past the back doors. Jemma went over to the person and asked, “Are you Marka Ragnos?”. “YES”, said the customer eagerly. Jemma hands over the bike to the customer saying, “Well enjoy your ride!”. The customer let out a little sound of glee as they touched the bike handles. The customer then eagerly strolled outside with his new rented bike. Jemma then took her pad out again and pressed the box for request filled. She then walks back to the backrooms where she continues with her day.

**Non-Goals**

The first iteration of the system will handle the processes involved in renting a bicycle, and managing reports. It will not:

* Messages/Emails between users.
* Handle Payroll
* Handle purchasing of supplies.
* Handle the storage of backup data, or data after a certain period of time. It is recommended to have secondary data storage to be used for archiving data or to be used to keep backups of the systems data.

**User Experience Flowchart**A paper with a diagram

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**Screen-by-Screen Specification**

Employee Retrieving Ordered Bike

Window #1: Open Requests

This window will display the current requests for bicycles needed from the back of the store to be brought to the front. It will show in a table the open requests by their number, and the time elapsed since the request was made. This timer will be auto increasing. Each row in the table is clickable, which will bring the user to the information about the request (window #2).

A close-up of a window

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Window #2: Request Information

Displays information about the request. It will display the request number, the name of the primary customer making the request, and a table that shows both what bike is requested and where that bike can be found in the back. There is also a check box in each row to be used when a bike has been found and is ready to be brought out. There are two main buttons on this window: Back - takes the user back to the Open Request window, Request Fulfilled – pressed when the bike has been delivered to the customer; logs that the request was fulfilled in system and takes creates a pop-up window (window #3)

A close-up of a computer screen

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Window #3: Request Fulfilled Pop-up

Informs the user that the request has been logged by the system. The user can manually close the pop-up window by the x in the corner or wait until the window closes automatically after a set amount of time. When the window closes, the user will be brought back to the Open Request window (window #1)

A pop up box with a note

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**Use Case Diagram** A diagram of a company

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**Use Cases**

**Administrator Removes Former Employees System Access**

|  |  |
| --- | --- |
| **Title** | As the system Administrator, I want to Remove a former Employees Access to the stores system to ensure that only current employees have access. |
| **Primary Actor** | Administrator. |
| **Stakeholders & Interest** | The Administrator wants to remove a former employees access to the system.  Current Employees want to ensure that they still have access to the system. |
| **Preconditions** | The Administrator has their access credentials to the system and that they know which employee that they wish to remove access to. |
| **Postconditions** | The former Employees’ access to the system is removed. |
| **Main Success Scenario** | 1. Administrator logs into the system using their unique login credentials.  2. Administrator navigates into User Accesses and Privileges within the system.  3. Administrator finds the former employee within the list of Users.  4. Administrator removes the former employees system access permissions. |
| **Extensions** | 1a. Administrator forgets / loses their access credentials.  3a. Administrator is unable to locate employee in the Users list.  4a. Administrator does not remove all the former employee’s system access. |
| **Special Requirements** | Ensure that the administrator preforming the access removal has appropriate authentication and is also authorized to remove the employee from the system. |
| **Technology & Variation List** | 2a. Administrator navigates into the Employee Roster.  2a1. Administrator finds the former employee from the list.  2a2. Administrator goes to the employee’s system profile.  2a3. Administrator selects the option to change accesses and privileges.  2a4. Administrator removes the former employee’s system access permissions. |
| **Frequency** | Unknown; Would have to check with stores employment history. |
| **Open Issues** | Do we want to track when an employee’s accesses have been changed in a report? This could help keep records of when accesses were granted or removed.  Do we want this whole process to be automated when an employee leaves the company? |