Name(s): <u>Hayden Anderson, Michael Elliott, Albert Morgan, Alex Ruef</u> http://web.engr.oregonstate.edu/~morgaalb/cs340-project/public/

Project Description, Requirements, Business Rules

Database Design – 10 points

ER Diagram & Relational Model

MySQL database tables, views, at least two trigger/procedure/function

Primary and foreign keys

Website Design, Layout & User manual – 15 points Including navigation, CSS

Application Functionality & Requirements: - 65 points

Below list at least six features of your website and how to test them. All input must be error checked. Functionality implemented without SQL can be listed for credit; however, you must have at least five SQL queries including at least one insert or update generated from user input and at least two complex queries involving multiple tables.

## 1. CUSTOMER LOGIN IN

To sign into as a customer, click the "Sign In" link on the navigation bar at the top of the page. If the user enters the wrong user name or password, then they will be redirected back to the login page and the text "Login failed" will be displayed at the top of the page. If the login is successful, the user will be redirected to their account page.

To test the login functionality, use the following credentials:

```
Username: juli
Password: tigger
```

The following PHP/SQL code is used to check if a user is in the database. If they are found, then a session is started that all other pages used to authenticate the user:

```
"SELECT * FROM Customer WHERE username = '" . $user . "'
AND pass = '" . $password . "'"
```

# 2. PLANS AND ADDRESSES

Each plan in the Plan table has a many-to-many relationship to the addresses in the Address table that tells which plans are available at which addresses. This link is stored in the Address\_Plans table. When users view plans, the page automatically tells them which plans are available at their address.

To test the address/plan functionality, log in with the credentials in step 1. Then from the account page, make sure your address is as following (this will not need to be changed if you haven't changed it from the default settings):

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Address number: 123 Street: 1st St. Apt. No: 12 City: Corvallis

State: OR Zip: 97333

\*\*\* NOTE: Address information must be entered exactly. Make sure to include things like the period after 'St'. Leave Apt. No blank \*\*\*

Then, navigate to the plans page by clicking "Shop" in the navigate bar. Note that the "Sluggy 56k" plan is available but the "Cheetah Cable" is not. Let's move to an address that has faster Internet! Navigate back to the Account page by clicking the "Account" link in the nav bar, and update the address as follows:

Address number: 456

Street: 2nd St.

Apt. No: 4
City: Corvallis

State: OR Zip: 97333

Remember to enter the information exactly as shown, and leave the Apt. No. blank! Now, click the "Update" button under the address boxes to save your changes. Now go back to plans by clicking the "Shop" button. Observe that the "Cheetah Cable" plan is now available!

The following PHP/SQL is used to retrieve the plans when the customer is logged in. \$\_SESSION['id'] is the customer's key in the Customer table, which is set by the login process. The query selects all plans from the Plan table, and joins on the Customer table where the customer is the currently logged in customer and the customer's address is associated with the plan. If the customer is not at an address with this plan, then c.id will be NULL:

```
"SELECT p.name, p.price, p.speed, c.id, p.id FROM Plan p

LEFT JOIN Customer c ON c.address_id IN (SELECT address_id

FROM Address_Plans WHERE plan_id = p.id) AND c.id = " .

$ SESSION['id']
```

#### ADDING BILLING INFO

Now let's enter some billing information so that we can subscribe to the "Cheetah Cable" plan. Every Customer may have multiple credit cards associated with their account, which are stored in the Billing\_Info table. After logging in from step 1 and changing your address in step 2, go to the Account page by clicking "Account" at the top of the page.

Scroll down the "Add a new card" section, and enter the following information:

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Your Name: Julianne Schutfort

Your Card: VISA

Number: 1234567890123456 Expiration: 01/01/2018

Feel free to enter different values, but card numbers must always be 16 digits (try entering a different one, it won't let you!). Now, click the "Add" button. The card should show up under "My Cards". Multiple cards can be added by repeating this process. The card info can be changed or deleted by updating the information in the "My Cards" section.

The following PHP/SQL inserts new cards into the Billing\_Info page:

```
"INSERT INTO Billing_Info (name, cc_type, cc_number, expiration_date, user_id) VALUES ('" . $name . "', '" . $card . "', " . $number . ", '" . $exp . "', " . $id . ")";
```

#### 4. SUBSCRIBING TO A PLAN

We're ready to get some blazing fast Internet! After completing steps 1-3, click on he "Shop" page and click on the "Subscribe now" link next to "Cheetah Cable". This page shows the user's current address (which is the address that the plan will be subscribed to. In class, we showed that the customer could select a different address than their own to subscribe the plan to, but people seemed confused by this function, so we removed it). The payment method can be selected with the drop-down list underneath the address. If the customer has more than one card, they can select which one they want to use here. If they have no cards, an error will be displayed and a link will direct them back to the account page to add a card.

Click on the "Subscribe" button. You will be redirected back to the "Account" page. Scroll down to the bottom of the page and you will see the plan under "My plans". You can delete a subscription from the page, too. If you try subscribing to the same plan twice at the same address, you will get an error page.

The following PHP/SQL inserts new subscriptions into the database:

```
"INSERT INTO Plan (name, price, speed) VALUES ('" . $plan name . "', " . $plan cost . ", " . $plan speed . " )"
```

The following PHP/SQL unsubscribes from a plan:

```
"DELETE FROM Subscription WHERE plan_id = " . $plan . " AND address_id = " . $address;
```

The following PHP/SQL is used by the Account page to get the plans

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```
'SELECT s.plan_id, s.address_id, s.billing_id, p.name, p.price, p.speed FROM Subscription s LEFT JOIN Plan p ON s.plan id = p.id WHERE customer id = ' . $ SESSION['id'];
```

#### 5. ADD A PLAN AS AN EMPLOYEE

If you are logged in after completing the previous steps, click the "Log Out" button in the upper right corner to log out. Then, click the "Sign In" button. Enter the credentials:

Username: hulk Password: smash

Check the "Employee?" box and click "Submit". You are now logged in to the Employee portal. Click the "Add Plan" link at the top of the page. Enter the following information:

Plan Name: Tiger T1 Speed: 1500 Cost: 300

Click the "Submit" button to create the plan. Click the "Shop" button to see that the plan has been added successfully. Note that because you are not logged in as a customer, there will be no plan availability information or subscribe links.

The following PHP/SQL inserts new plans into the database:

```
"INSERT INTO Plan (name, price, speed) VALUES ('" . $plan_name . "', " . $plan_cost . ", " . $plan speed . " )"
```

### 6. ADD AN ADDRESS TO A PLAN

After an employee adds a plan, they must associate addresses with it so that it will be available for customers to subscribe to (before you do this step, if you log back into juli you will see that you can't subscribe to "Tiger T1" yet). After completing steps 1-5, make sure you are logged in as an employee by completing the first part of step 5 if necessary. Then, click the "Edit Plans" button at the top of the page. Select "Tiger T1" from the top-down list. Here, the name, price and speed of the plan can be edited. The drop-down list under these values lets the employee add new addresses to this plan. Select "456 2<sup>nd</sup> St. Corvallis OR 97333" from the dropdown list and click the "Add Address" button. A page should load that says "Update successful".

Log back into juli (see the credentials in step 1). Click on the "Plans" page, and you should see the text "Subscribe now!" in the last column next to the "Tiger T1" plan.

The following PHP/SQL code is used to insert new address/plan associations into the database:

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```
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"Insert Address_Plans SET plan_id = '" . $planID . "',
address_id = " . $address[0]
```

Total 100 points

CS 340: Project Grading Sheet
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What t	o submit to Canvas. DO NOT ZIP!
	Project Report
	Grade Sheet
	Screenshots of the content and structure of your database tables.
	In comments URL & onid username of the student that submitted to TEACH
What to submit to TEACH. (If you are working in a group submit a single copy)	
	Zipped folder containing all files for website and all exported SQL files for your database.