Revised MizzouCheckout System

University of Missouri

CS3380: Database Applications and Information Systems

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13th May 2016

# Introduction

Please provide a detailed description of the problem (as defined by your client).

For many of you, these are white label apps. For example, the Logboat project can be used by any brewery. When you share the information about the problem, focus on the general case as much as possible.

Include the MIT license disclaimer here as well. *This disclaimer should be added to each of the scripts used by your system as well.* You can find disclaimer text at the following link: <http://opensource.org/licenses/MIT>

# ERD

Provide an ERD that reflects the database used by your group. This is different from the one posted in the slack channel. It should be much more detailed, providing the attribute names. Take a look at the desktop application, MySQL workbench, for this. It can generate detailed ERDs for you by connecting to your database.



# Queries

All of the queries used by your system should be detailed here. Provide the SQL and a detailed description of what each queries will return.

# Analytics

What sorts of analytics are conducted by your system? Reference the specific queries used to conduct those analytics. How are these analytics useful?

# Normalization

What normal form are each of your tables in. Many will likely be in BCNF, for those you may group them together and say, “Table1, Table2, and Table3 are in BCNF.” For those that are not in BCNF, provide the NF and explain why you chose to go with a lower NF.

# Indexing

What indexes did you create for your database? Everyone’s system should have indexes other than the default indexes created by MySQL. Explain why you created those indexes and discuss the benefits.

# Security

What security measures are taken to ensure that the system isn’t vulnerable to the types of attacks that were discussed in class. (SQL injection, XSS attacks, enforcing HTTPS, etc..). Do you hash passwords? What hashing technique do you rely on? Do you encrypt any other sensitive data? This section should provide significant detail about the security measures taken.

# Other Topics

Do you use triggers? Share anything else that needs to be shared with potential users.

# User Manual

## Installation

Step by step, how do you deploy your system. What are the software dependencies (PHP, MySQL, etc..). Do you use any additional libraries (mysqlnd)? How do you install those dependencies? How do you setup the database (Create database, then import using SQL?)? How do you host the website? By reading through this section, I should be able to deploy your system on another server without any issues/questions.

## Website Usage

Create a section for each page in the site. How do you use each page. Include screenshots in each section so there is no confusion. Organize the sections (pages) so that it follows a logical order for using the site. (i.e. Login will likely be the first section). This will be especially important if some pages in your site have dependencies. For example, if one page requires you to select a category from a dropdown menu, the user would likely have been required to create that category using a different webpage first.