**Teamee**

Software Design Document

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**TABLE OF CONTENTS**

**1. INTRODUCTION 2**

1.1 Purpose 2

1.2 Scope 2

1.3 Overview 2

1.4 Reference Material 2

**2. SYSTEM OVERVIEW 2**

**3. SYSTEM ARCHITECTURE 2**

3.1 Architectural Design 2

3.2 Decomposition Description 3

3.3 Design Rationale 3

**4. DATA DESIGN 3**

4.1 Data Description 3

4.2 Data Dictionary 3

**5. COMPONENT DESIGN 3**

**6. HUMAN INTERFACE DESIGN 4**

6.1 Overview of User Interface 4

6.2 Screen Images 4

6.3 Screen Objects and Actions 4

**7. REQUIREMENTS MATRIX 4**

**8. APPENDICES 4**

**1. INTRODUCTION**

**1.1 Purpose**

This software design document describes the architecture and system design of the Teamee web application.

**1.2 Scope**

This document will focus on the GUI of the Teamee application. It will also contain designs of the website’s software architecture.

**1.3 Overview**

This Design Document will contain a:

1. Purpose
2. Scope
3. Reference
4. System Overview
5. System Architecture
6. Data Design
7. Component Design
8. Appendix

**1.4 Reference Material**

Wiegers, Karl, *Software Requirements (3 rd Edition* ), Microsoft Press 2013.

**2. SYSTEM OVERVIEW**

The framework that shall be used is Laravel 5.4. Laravel is a PHP framework that contains its own template and supports PHP directly in its pages.

Front End Framework

1. Materialize
2. Bootstrap
3. Animate.css

**3. SYSTEM ARCHITECTURE**

**3.1 Architectural Design**

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Figure 1: Swimline diagram

The swimline diagram showed a flow when a customer began to place an order on the website. This diagram helps shows the entities that are involved and the activities that take place. The flow began when customers placed items into a chart, they can then go to checkout. During checkout, customers are asked for some personal information such as name, billing address, and credit card information. The information is transferred to Stripe, a company that helps in the billing process. After Stripe verified that the credit card is valid and payment is processed, the order go to the store selected. Employees at the store received the order and fulfill the order. The order is hold until the customer come to the store and picks up the order.

**3.2 Decomposition Description**

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Figure 2: DFD for placing an order

The data flow diagram shows the flow of data when a customer placed an order. This diagram should be used in conjunction with Figure 1. The DFD shows a more detailed view of all the data that occur during an order placement.

**3.3 Design Rationale**

**3.3.1 Trade Study**

|  |  |  |
| --- | --- | --- |
| Quality Attribute | MySQL | MongoDB |
| Performance | 7 | 7 |
| Ease of Use | 6 | 9 |
| Compatibility | 10 | 0 |
| Supportability | 8 | 5 |
| Scalable | 6 | 9 |
| Reliability | 8 | 5 |
| **Total** | 45 | 35 |

**3.4 System Context Diagram**



**4. DATA DESIGN**

**4.1 Data Description**

MySQL shall be used as the database.

**4.2 Data Dictionary**

|  |  |  |  |
| --- | --- | --- | --- |
| **Data Element** | **Description** | **Composition/Data Type** | **Length** |
| First Name | The user’s first name | String | 50 |
| Last Name | The user’s last name | String | 50 |
| User’s email address | The user’s email address | String | 50 |
| Order number | Auto incremental order number for each order placed by the user | Primary key  Integer | 10000000 |
| Item Number | Each item sold by Teamee is assigned an item number | Integer | 1000 |
| Payment Method |  | Alphabetic | 16 |
| Transaction Number |  | Integer | 12 |

**5. COMPONENT DESIGN**

**5.1 Login Pseudocode**

header.php  
check for cookie  
if exist set control panel with options and logout  
if none exist check session,  
if exist set control panel with options,  
if none exist  
exit

Ask for login and password with remember option (will set cookie)  
user inputs details, database check to see if user exists  
if exist register session and setcookie if remember option true  
else  
show signup so user can register

**6. HUMAN INTERFACE DESIGN**

**6.1 Overview of User Interface**

The user interface for the system will allow the user to easily place and order and view information about Teamee.

**6.2 Screen Images**

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Figure 3: Mockup of the homepage

**6.3 Screen Objects and Actions**

**7. QUALITY ATTRIBUTES**

**7.1 Quality Attribute Scenarios**