Institute of Technology Australia

**Database Design and Architecture** Document

e-Commerce Website for

Bazaar Ceramics.

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| **Version History** | | | |
| **Version** | **Date** | **Revised by** | **Reason for Change** |
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# **Current processes**

## **Phone order form for account customers**

|  |
| --- |
|  |
| Figure 1 – Order form for Account Customers |

## **Phone order form for non-account customers**

|  |
| --- |
|  |
| Figure 2 – Order form for Non-Account Customers |

## **Product**

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|  |
| Figure 2 – Product details |

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# **Required information**

## **Users**

* Account number
* First name
* Last name
* Role
* Email
* Password
* Address
* Date created

## **Products**

* Product name
* Product image
* Product description
* Size
* Price
* Glaze type
* Category
* Date produced

## **Orders**

* Total price
* Customer
* Date of order

## **Messages**

* Name
* Subject
* Email
* Body

## **Details of Orders**

* ItemId
* Quantity per item
* Unit price
* Discount

# **Logical Model**

|  |
| --- |
|  |
|  |

# **Tables and Data**

## Table structure for table categories

|  |  |  |  |
| --- | --- | --- | --- |
| Column | Type | Null | Default |
| id | int(11) | No |  |
| name | varchar(255) | No |  |
| slug | varchar(255) | No |  |
| created\_at | timestamp | Yes | NULL |
| updated\_at | timestamp | Yes | NULL |
| deleted\_at | timestamp | Yes | NULL |

## Table structure for table orders

|  |  |  |  |
| --- | --- | --- | --- |
| Column | Type | Null | Default |
| id | int(11) | No |  |
| user\_id | int(11) | No |  |
| order\_no | varchar(255) | No |  |
| created\_at | timestamp | Yes | NULL |
| updated\_at | timestamp | Yes | NULL |
| deleted\_at | timestamp | Yes | NULL |

## Table structure for table order\_details

|  |  |  |  |
| --- | --- | --- | --- |
| Column | Type | Null | Default |
| id | int(11) | No |  |
| user\_id | int(11) | No |  |
| product\_id | int(11) | No |  |
| unit\_price | float | No |  |
| quantity | int(11) | No |  |
| total | float | No |  |
| status | varchar(255) | No |  |
| order\_no | varchar(255) | No |  |
| created\_at | timestamp | Yes | NULL |
| updated\_at | timestamp | Yes | NULL |
| deleted\_at | timestamp | Yes | NULL |

## Table structure for table payments

|  |  |  |  |
| --- | --- | --- | --- |
| Column | Type | Null | Default |
| id | int(11) | No |  |
| user\_id | int(11) | No |  |
| order\_no | varchar(255) | No |  |
| amount | float | No |  |
| status | varchar(255) | No |  |
| created\_at | timestamp | Yes | NULL |
| updated\_at | timestamp | Yes | NULL |
| deleted\_at | timestamp | Yes | NULL |

## Table structure for table products

|  |  |  |  |
| --- | --- | --- | --- |
| Column | Type | Null | Default |
| id | int(11) | No |  |
| name | varchar(255) | No |  |
| price | float | No |  |
| description | text | No |  |
| category\_id | int(11) | No |  |
| sub\_category\_id | int(11) | No |  |
| quantity | int(6) | No |  |
| image\_path | varchar(255) | No |  |
| featured | tinyint(4) | No |  |
| created\_at | timestamp | Yes | NULL |
| updated\_at | timestamp | Yes | NULL |
| deleted\_at | timestamp | Yes | NULL |

## Table structure for table sub\_categories

|  |  |  |  |
| --- | --- | --- | --- |
| Column | Type | Null | Default |
| id | int(11) | No |  |
| name | varchar(255) | No |  |
| slug | varchar(255) | No |  |
| category\_id | int(11) | No |  |
| created\_at | timestamp | Yes | NULL |
| updated\_at | timestamp | Yes | NULL |
| deleted\_at | timestamp | Yes | NULL |

## Table structure for table users

|  |  |  |  |
| --- | --- | --- | --- |
| Column | Type | Null | Default |
| id | int(11) | No |  |
| username | varchar(255) | No |  |
| full\_name | varchar(255) | No |  |
| email | varchar(255) | No |  |
| password | varchar(255) | No |  |
| street\_address | varchar(50) | No |  |
| post\_code | varchar(10) | No |  |
| city\_suburb\_town | varchar(50) | No |  |
| state\_territory | varchar(50) | No |  |
| country | varchar(45) | No |  |
| role | varchar(50) | No |  |
| agent | varchar(255) | No |  |
| ip | varchar(50) | No |  |
| geo\_status | int(11) | No |  |
| geo\_city | varchar(10) | No |  |
| geo\_region | varchar(50) | No |  |
| geo\_region\_code | varchar(10) | No |  |
| geo\_region\_name | varchar(50) | No |  |
| geo\_country\_code | varchar(10) | No |  |
| geo\_country\_name | varchar(50) | No |  |
| geo\_latitude | varchar(50) | No |  |
| geo\_longitude | varchar(50) | No |  |
| geo\_timezone | varchar(50) | No |  |
| geo\_currency\_code | varchar(10) | No |  |
| geo\_currency\_symbol\_utf8 | varchar(10) | No |  |
| geo\_currency\_converter | float | No |  |
| created\_at | timestamp | Yes | NULL |
| updated\_at | timestamp | Yes | NULL |
| deleted\_at | timestamp | Yes | NULL |

# **Final Report**

## **Database Credentials for testing purposes**

|  |  |
| --- | --- |
| Name | iota\_assessment |
| User | Root |
| Password | No Password |

## **Scope**

To provide a layer of persistence for the e-Commerce system for Bazaar Ceramics.

## **Design Principles**

Tables have been normalised in accordance to create a Relational Model.

## **Abstraction**

PDO is being used to provide data-access abstraction layer.