Database Tables

Customer Table

The customer table represents information relating to a user who has registered to make an account. The fields in Figure 1 represent the information that captures a customer, which gets encapsulated into three separate objects, Address, Account and Customer.

```
mysql> desc Customer;
+------------+-------------+------+-----+---------+----------------+
| Field      | Type        | Null | Key | Default | Extra          |
+------------+-------------+------+-----+---------+----------------+
| customerID | int         | NO   | PRI | NULL    | auto_increment |
| fName      | varchar(35) | YES  |     | NULL    |                |
| lName      | varchar(50) | YES  |     | NULL    |                |
| email      | varchar(50) | YES  |     | NULL    |                |
| address    | text        | YES  |     | NULL    |                |
| password   | varchar(64) | YES  |     | NULL    |                |
| phone      | varchar(15) | YES  |     | NULL    |                |
+------------+-------------+------+-----+---------+----------------+
```

Figure 1: Structure of Customer Table

```
+------------+-------------+---------+--------------------------+---------------------------------+-----------
--+
| customerID | fName       | lName   | email                    | address                         | password
  |
+------------+-------------+---------+--------------------------+---------------------------------+-----------
--+
|          1 | Aoife       | Murphy  | aoife.murphy@gmail.com   | 12 Main St, Dublin, Ireland     | de9ad42a71
9 |
|          2 | Sean        | Murphy  | sean.oconnor@hotmail.ie  | 45 Elm Road, Cork, Ireland      | e337af8bad
  |
|          3 | Padraig     | Kelly   | padraig.kelly@example.com | 34 Pine Lane, Limerick, Ireland | 966e2eaa40
  |
|          4 | Mark        | Lambert | marklambert123@gmail.com | Ireland                         | 9390298f3f
  |
|          5 | Hannah      | Flint   | flinthannah@aol.com      | Goldthorpe, Yorkshire, England  | 46b9e6bdf3
2 |
|         16 | Ad          | Min     | admin@growingpains.com   | Admins Basement                 | ca978112ca
  |
|         17 | Password =  | a       | a@a                      | Note the hash output for "a"    | ca978112ca
  |
|         18 | Boe         | Jloggs  | boejloggs@geocities.com  | 308 Negra Arroyo Lane           | 0206f2eade
  |
+------------+-------------+---------+--------------------------+---------------------------------+-----------
```

Figure 2: Sample Data of Customer Table

[1]

[1] Note, password field has been cropped for readability reasons, as the hashed password stretches the screenshot aspect ratio out, making text too small

Product Table

The product table contains fields which uniquely describe a product, which as of the current release, may have two categories: Plant and Accessory.

```
mysql> describe Product;
+-------------+--------------+------+-----+---------+----------------+
| Field       | Type         | Null | Key | Default | Extra          |
+-------------+--------------+------+-----+---------+----------------+
| productID   | int          | NO   | PRI | NULL    | auto_increment |
| productName | varchar(40)  | YES  |     | NULL    |                |
| description | text         | YES  |     | NULL    |                |
| price       | decimal(4,2) | YES  |     | NULL    |                |
| qty         | int          | YES  |     | NULL    |                |
| category    | varchar(30)  | YES  |     | NULL    |                |
| image_path  | varchar(255) | NO   |     | NULL    |                |
+-------------+--------------+------+-----+---------+----------------+
```

Figure 4: Structure of Product table

mysql> select * from Product;

productID	productName	description	price	qty	category	image_path
3	Pothos	Pothos 13cm pot, suitable for all owners	14.99	25	Plant	images/pothos.png
4	Golden Mister	Golden mister, ideal for orchids and high hummidty plants	8.99	12	Accessory	images/mister.png
5	Monstera	Monstera Adasonii w/ 15cm pot, suitable for all owners	12.99	41	Plant	images/monsterra.png
6	7cm Giraffe Pot	Gooft Giraffe pot to make your plants more fun	2.99	23	Accessory	images/griaffe_pot.png
7	Maidenhair Fern	Maidenhair Fern w/ 6cm pot, suitable for all owners	6.99	4	Plant	images/fern.png
8	Green Pot	Green Pot w/ Eye Design	8.99	3012	Accessory	images/pot_eyes.png
21	Golden Pothos	Golden Pothos w/ 8cm pot, suitable for all owners	5.99	26	Plant	images/golden_pothos.png
22	13cm Pot with Motif	Hand painted ceramic pot	10.99	10	Accessory	images/pot_egg.png
23	Pilea	Chinese Money plant (Pilea) in a kokedama. Kokedama is a ball of soil, covered with moss on which an ornamental plant grows. The idea has its origins in Japan, where it is a method of bonsai styling. Watering: Mist regularly, immerse in water when dry	5.99	27	Plant	images/pilea.png
24	Moisture Meter	Moisture Meter - Single probe, excellent for all experience levels for watering	4.99	38	Accessory	images/moisture_meter.png
25	Spider Plant	Spider Plant - Suitable for all experience levels, loves humidity	9.99	27	Plant	images/spider.png
26	8cm Pot with Wooden Stand	Duck egg blue pot with wooden stand	14.99	4	Accessory	images/pot_stand.png
27	String of Hearts	String of Hearts - Vining indoor plant	9.99	12	Plant	images/soh.png
28	String of Bananas	String of Bananas - Succulent vining plant	19.99	10	Plant	images/sob.png
29	Alocasia Poly	Alocasia - Elephant's Ear or Poly	15.99	14	Plant	images/alocasia.png

Figure 3: Sample Data for Product table

[2]

[2] Note, the description for productID: 23 is intentionally long-winded to demonstrate usage of JTextArea elements.

Orders

The orders table captures data relating to each order a customer has made. A record gets added to this table once the user successfully completes the checkout process. A key area for future development is to simplify the many-to-many relationship that exists between the Orders and Product table.

```
mysql> describe Orders;
+-----------------+---------------+------+-----+---------+----------------+
| Field           | Type          | Null | Key | Default | Extra          |
+-----------------+---------------+------+-----+---------+----------------+
| orderID         | int           | NO   | PRI | NULL    | auto_increment |
| customerID      | int           | YES  |     | NULL    |                |
| date            | date          | YES  |     | NULL    |                |
| time            | time          | YES  |     | NULL    |                |
| shippingAddress | text          | YES  |     | NULL    |                |
| totalPrice      | decimal(10,2) | YES  |     | NULL    |                |
+-----------------+---------------+------+-----+---------+----------------+
```

Figure 5: Structure of Orders Table

```
mysql> select * from Orders;
+---------+------------+------------+----------+-----------------+------------+
| orderID | customerID | date       | time     | shippingAddress | totalPrice |
+---------+------------+------------+----------+-----------------+------------+
|       1 |          4 | 2025-03-29 | 11:58:21 | Ireland         |      95.90 |
|       2 |          4 | 2025-03-29 | 20:41:34 | Ireland         |       8.99 |
|       3 |          4 | 2025-03-29 | 20:43:54 | Ireland         |       6.99 |
|       4 |         11 | 2025-03-29 | 21:18:40 | a               |      19.98 |
|       5 |         11 | 2025-03-29 | 23:49:18 | a               |       5.99 |
|       6 |         11 | 2025-03-30 | 00:10:52 | a               |       2.99 |
|       7 |          4 | 2025-03-30 | 00:23:27 | Ireland         |       0.00 |
|       8 |          4 | 2025-03-30 | 00:24:47 | Ireland         |       9.99 |
|       9 |          0 | 2025-03-30 | 17:35:41 | a               |      64.94 |
|      10 |         10 | 2025-03-30 | 17:37:29 | a               |       6.99 |
|      16 |         12 | 2025-03-30 | 22:53:41 | a               |      10.99 |
|      17 |         10 | 2025-04-02 | 00:10:16 | a               |      12.99 |
+---------+------------+------------+----------+-----------------+------------+
```

Figure 6: Sample Data for Orders Table