



Sri Lanka Institute of Information Technology

B.Sc. Honors Degree in Information Technology

Specialized in Software Engineering

Final Examination
Year 3, Semester 1 (2021)

SE3040 – Application Frameworks

Final Paper Report

Student ID number: IT19180526

Name: Chandrasiri S. A. N. L. D.

For Evaluations:


| Marks Allocation | Marks |
|--|-------|
| Implementation of User Interfaces - 24 marks | |
| Implementation of service endpoints. - 30 marks | |
| Implementation of the calculation service. - 24 marks | |
| Suitable technology selection (Student will be eligible for this mark if only he/she select the correct technologies for the different parts of the application). - 10 marks | |
| At least one-unit test for either part of the application (UI / services). - 5 marks | |
| Styling of the UI. - 2 marks. | |
| Coding standards and quality- 5 marks | |

Comments:

Photograph of the Student ID

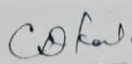
The image shows a SLIIT Student ID card. At the top, there is a blue header with the SLIIT logo (a shield with a book and a torch) and the text "SLIIT Discover Your Future" and "STUDENT ID". Below the header is a photograph of a man with dark hair and a beard, wearing a dark blue shirt. To the right of the photo, the name "Chandrasiri S. A. N. L. D." is printed. Below the name, the registration number "Reg. No: IT 19 1805 26" is shown, followed by the NIC number "NIC No: 962772137V" and the date of issue "Date of Issue: 19-03-2019". A large, stylized "2019" is printed vertically on the right side of the card. Below the date, there is a signature and the text "Director / Administration". At the bottom, there is a barcode. On the far right, there is a vertical line of text: "If found please return to SLIIT, New Kandy Road, Malabe."

SLIIT
Discover Your Future
STUDENT ID




Chandrasiri S. A. N. L. D.

Reg. No: IT 19 **1805** 26
NIC No: **962772137V**
Date of Issue: **19-03-2019**


Director / Administration

2019

If found please return to SLIIT, New Kandy Road, Malabe.



Screenshots of all user interfaces of the frontend application

AF - 2021 Add Category Category-List Add Product Product-List Calculator

Category

Add new Category

Category Name

Description

Products

Add CategoryReset

AF - 2021 Add Category Category-List Add Product Product-List Calculator

Category

Category List

| Name | Description | |
|--------------------|----------------------------|--------------------------------|
| Groceries | Dry food | <button>View Products</button> |
| Beverages | Drink | <button>View Products</button> |
| Special Package #1 | This is Special Package #1 | <button>View Products</button> |
| Special Package #2 | This is Special Package #2 | <button>View Products</button> |

Product Details

| Code | Name | Amount | Size |
|--|------|--------|------|
| Click on View Products Button for Load Products... | | | |

Category

Category List

| Name | Description | |
|--------------------|----------------------------|-------------------------------|
| Groceries | Dry food | View Products |
| Beverages | Drink | View Products |
| Special Package #1 | This is Special Package #1 | View Products |
| Special Package #2 | This is Special Package #2 | View Products |

Product Details

| Code | Name | Amount | Size |
|------|-----------|--------|------|
| P003 | Coca Cola | 150 | 1 |
| P004 | Sprite | 150 | 1 |

Category

Add new Category

Product Code

Product Name

Product Price

Size

Categories

 [Add Product](#) [Reset](#)

Product

Product List

| Product Code | Product Name | Product Price | Size | |
|--------------|--------------|---------------|------|--------------------------------|
| P001 | Rice | 230 | 1 | Delete Product |
| P002 | Rice 2 | 150 | 1 | Delete Product |
| P003 | Coca Cola | 150 | 1 | Delete Product |
| P004 | Sprite | 150 | 1 | Delete Product |

Order Price Calculator

Delivery Price

Select Products

[Calculate](#) [Reset](#)

Screenshots of all MongoDB collections

The screenshot displays the MongoDB Compass interface for the 'af.categories' collection. The top navigation bar includes tabs for Documents, Aggregations, Schema, Explain Plan, Indexes, and Validation. The 'Documents' tab is active. The top right corner shows statistics: 4 documents, 584B total size, 146B average size, 1 index, 36.0KB total size, and 36.0KB average size. Below the navigation bar, there is a filter bar with a placeholder '{ field: 'value' }' and buttons for FILTER, OPTIONS, FIND, RESET, and a refresh icon. A toolbar below the filter bar includes an ADD DATA button, a download icon, a VIEW button, and icons for list, JSON, and grid views. The main area displays four documents, each with a collapse/expand icon on the left and edit, share, copy, and delete icons on the right. The documents are as follows:

- `{ "_id": ObjectId("60c5de17cfec3b0964323187"), "products": Array, "name": "Groceries", "description": "Dry food", "__v": 0 }`
- `{ "_id": ObjectId("60c5dee0cfec3b096432318b"), "products": Array, "name": "Beverages", "description": "Drink", "__v": 0 }`
- `{ "_id": ObjectId("60c5ec328030f224244a2fc7"), "products": Array, "name": "Special Package #1", "description": "This is Special Package #1", "__v": 0 }`
- `{ "_id": ObjectId("60c5f4748030f224244a2fc9"), "products": Array, "name": "Special Package #2", "description": "This is Special Package #2", "__v": 0 }`

At the bottom right of the document list, it says 'Displaying documents 1 - 4 of 4' with navigation arrows and a REFRESH button.

FILTER

{ field: 'value' }

OPTIONS

FIND

RESET

ADD DATA

VIEW

Displaying documents 1 - 4 of 4

REFRESH

| |
|--|
| <div>></div> <div><div>_id: ObjectId("60c5dc33ab55d8093c5de84d")</div><div>> categories: Array</div><div>code: "P001"</div><div>name: "Rice"</div><div>amount: 230</div><div>size: 1</div><div>__v: 0</div></div> <div></div> <div></div> <div></div> <div></div> |
| <div></div> <div><div>_id: ObjectId("60c5dc6fab55d8093c5de84e")</div><div>> categories: Array</div><div>code: "P002"</div><div>name: "Rice 2"</div><div>amount: 150</div><div>size: 1</div><div>__v: 0</div></div> <div></div> <div></div> <div></div> <div></div> |
| <div></div> <div><div>_id: ObjectId("60c5de93cfec3b0964323188")</div><div>> categories: Array</div><div>code: "P003"</div><div>name: "Coca Cola"</div><div>amount: 150</div><div>size: 1</div><div>__v: 0</div></div> <div></div> <div></div> <div></div> <div></div> |
| <div></div> <div><div>_id: ObjectId("60c5de9ecfec3b0964323189")</div><div>> categories: Array</div><div>code: "P004"</div><div>name: "Sprite"</div><div>amount: 150</div><div>size: 1</div><div>__v: 0</div></div> <div></div> <div></div> <div></div> <div></div> |