Brick Ordering System

This document contains the design and information about the implementation of a REST API to create a simple brick ordering system.

# Objective

Develop a JAVA service that provides implementation for a simple system ordering system for a fictional organisation that sells bricks.

# System Design

This REST client is built in Spring Boot leveraging Maven. The architecture of BrickOrderSystem can be understood by the following flow diagram:

## 2.1 Application Architecture Flowchart

* **order()**
* **getAllOrders()**
* **getOrder(id)**
* **updateOrder(id)**
* **fulfilOrder(id)**

Exposed rest client methods()

**OrderController.java**

Entity

**BrickOrder**

Returns Response

Exception Handler

**PrettyPrintJSON.java**

BAD REQUEST: 400

**OrderControllerTest.java**

**JUNIT TEST SUITE**

**JSON RESPONSE**

*BrickOrderSystem Process Flowchart*

## 2.2 Application Execution and Testing

### 2.2.1 Curl Commands

The sample curl commands for invoking each method in the API is documented at [curlCommandsLocation](https://github.com/PrernaJain14/BricksOrderRestApplication/tree/master/curlCommands).

### 2.2.2 JUNIT TEST SUITE

The JUNIT TEST Cases for each method is provided in OrderControllerTest.java class.

## 2.3 SMART JSON PRINT

For displaying JSON Response in a user readable format, the sample code take from stackOverflow is used in PrettyPrintJSON.java

## 2.4 Software development tools

The Software Development Tools used with in the application are:

1. Eclipse IDE
2. Reference of spring.start.io to build the maven Project with Spring boot.