

**FOOTBALL FIELD BOOKING SYSTEM**

**Software Design Document**

– HCM, August 2022 –

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# I. Overview

## 1. Code Packages/Namespaces

*[Provide the package diagram for each sub-system. The content of this section including the overall package diagram, the explanation, package and class naming conventions in each package. Please see the sample and description table format below – following Java project naming convention]*

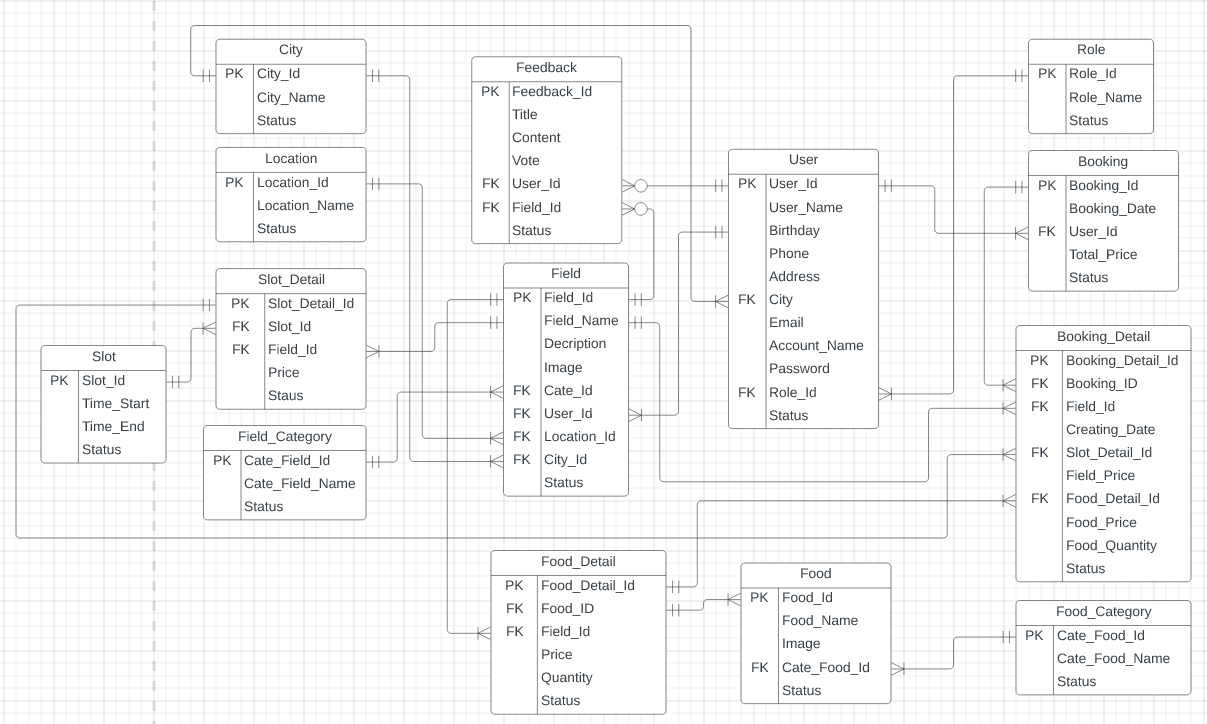


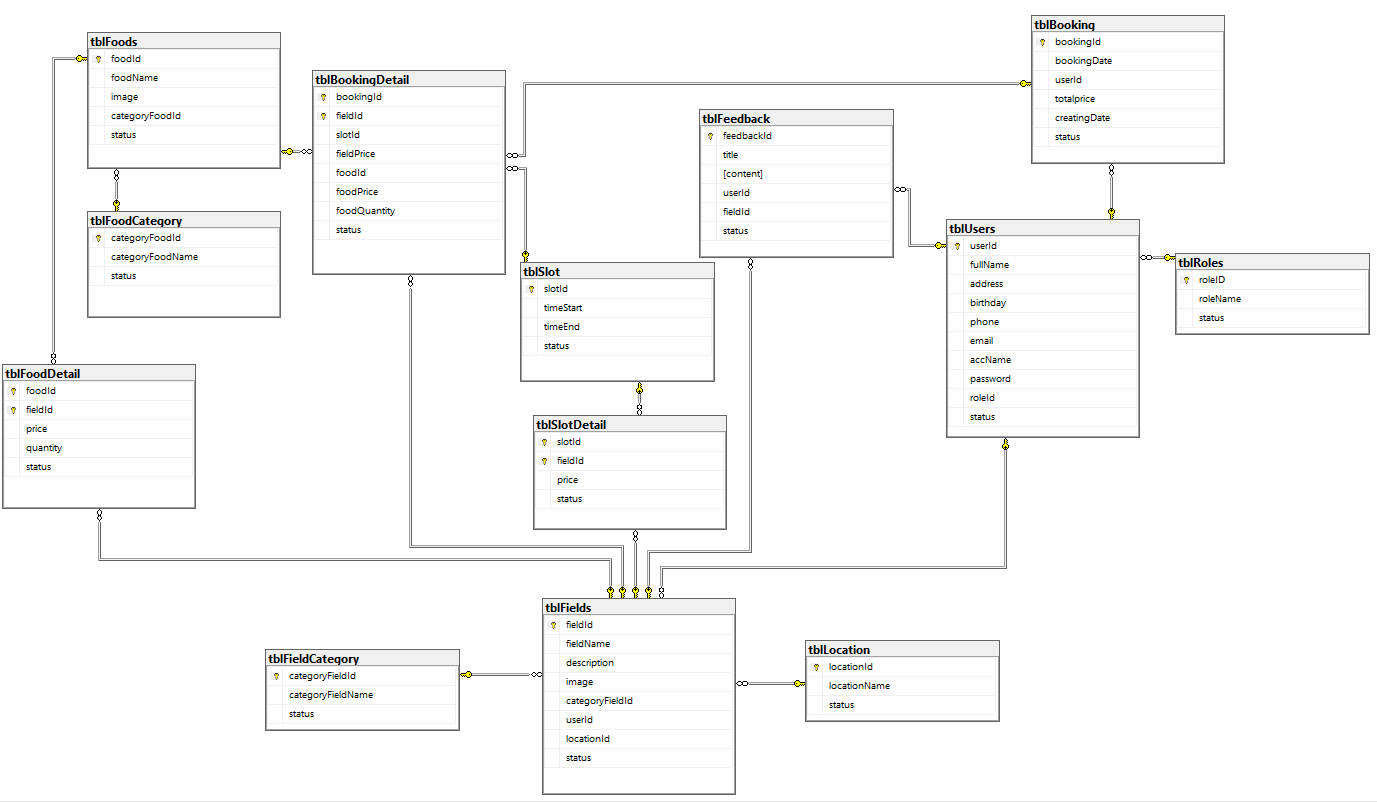
***Package descriptions & package class naming conventions***

| **No** | **Package** | **Description** |
| --- | --- | --- |
| *01* | *controllers* | *<Description of the package>*  *-Contains servlets to receive user requests from jsp pages to process requests and return results.*  *<Class naming convention>*  *-Name in such a way that all the first letter of each word is capitalized* |
| *02* | *daos* | *-Contains functions that perform database interactions for controllers when they are called*  *–Named in such a way that the first letter of each word is capitalized with a DAO* |
| *03* | *utis* | *-Make java project link with database*  *-Naming with initials 2 (DB) and capitalize first word of utils* |
| *04* | *dto* | *-Contains project objects*  *-Name in such a way that all the first letter of each word is capitalized* |
| *05* | *stackjava.com.accessgoogle.common* | *-Make a connection with google*  *-Contains the object that google returns*  *-Contains methods to be able to log in with google accounts*  *-Name in such a way that all the first letter of each word is capitalized* |
| *06* | *stackjava.com.accessgoogle.servlet* | *-Servlet handle connection with google*  *-Name in such a way that all the first letter of each word is capitalized* |

## 2. Database Schema

ERD + Database Diagram





***Table descriptions & package class naming conventions are as below***

| **No** | **Table** | **Description** |
| --- | --- | --- |
| 01 | tblUsers | <Description of the table>  - Primary keys: userId  - Foreign keys: roleId |
| 02 | tblFields | <Description of the table>  - Primary keys: fieldId  - Foreign keys: categoryId, userId, locationId |
| 03 | tblRole | <Description of the table>  - Primary keys: roleId |
| 04 | tblBooking | <Description of the table>  - Primary keys: bookingId  - Foreign keys: userId |
| 05 | tblBookingDetail | <Description of the table>  - Primary keys: bookingId, fieldId  - Foreign keys: bookingId, fieldId |
| 06 | tblLocation | <Description of the table>  - Primary keys: locationId |
| 07 | tblCategory | <Description of the table>  - Primary keys: categoryId |
| 08 | tblFeedback | <Description of the table>  - Primary keys: feedbackId  - Foreign keys: userId, fieldId |
| 09 | tblSlot | <Description of the table>  - Primary keys: slotId |
| 10 | tblSlotDetail | <Description of the table>  - Primary keys: slotId, fieldId  - Foreign keys: slotId, fieldId |
| 11 | tblFood | <Description of the table>  - Primary keys: foodId  - Foreign keys: categoryFoodId |
| 12 | tblFoodDetail | <Description of the table>  - Primary keys: foodId, fieldId  - Foreign keys:foodId, fieldId |
| 13 | tblFoodCategory | <Description of the table>  - Primary keys: categoryFoodId |

# II. Code Designs

## 1. <Feature/Function Name1>

*[Provide the detailed design for the function <Feature/Function Name1>. It include Class Diagram, Class Specifications, and Sequence Diagram(s)]*

1.<View contact information/View contact information> :It include

2.<View home page/View landing page>

3.<Profile of user/View account’s profile>

4.<Update profile of user/View account’s profile>

5.<Login (google)/Authentication>

6.<Create account for Customer/Sign up account>

7.<Forgot Password/Reset password>

8.<View admin page/View admin page>

9.<Delete account/Manage list of accounts>

10.<Search account/Manage list of accounts>

11.<Update account/Manage list of accounts>

12.<Update status Field/Manage list of fields>

13.<Search Field/Manage list of fields>

14.<Delete Field/Manage list of fields>

15.<Search info history Booking field/Manage Booking field>

16.<Detail info history booking/Manage Booking field>

17.<View Screen Customer/View Screen Customer>

18.<Search Active Field/View list of field>

19.<View detail of Field/View field detail>

20.<Feedback/View field detail>

21.<View Similar Field/View field detail>

22.<Update Order Field/Booking field>

23.<Delete Order Field/Booking field>

24.<Create information Order Field/Booking field>

25.<Booking confirm/Booking field>

26.<View QR code/Pay money>

27.<Check out/Pay money>

28.<View all Order of customer/View history of booking>

29.<Search order of customer/View history of booking>

30.<View detail booked fields/View detail history of booking>

31.<View list field of Manager/Manage list owner’s field>

32.<Search field of manager/Manage list owner’s field>

33.<Sort Field of manager/Manage list owner’s field>

34.<Delete Field of manager/Manage list owner’s field>

35.<Create information of new Field/Create new field>

36.<View information detail of Field/Manage owner’s field detail>

37.<View all booking field of customer/ View booking history of owner’s field>

38.<Search booked Field/View booking history of owner’s field>

39.<Delete Customer Booking/View booking history of owner’s field>

40.<View detail booking/View booking history of owner’s field>

41.<Search order /Manage order >

42.<Delete Order /Manage order >

43.<Income of all order/Manage order >

44.<Search Food/Manage food>

45.<Delete Food/Manage food>

46.<View Food/Manage food>

47.<Update Food/Manage food>

48.<Create Food/Manage food>

49.<Create slot of field/Manage slot of Field>

50.<Update slot of field/Manage slot of Field>

51.<Delete slot of field/Manage slot of Field>

52.<Search slot of field/Manage slot of Field>

53.<Change password/Manage account>: It include controllers (MainController, ResetPasswordController) , daos(UserDAO), dto(user)

### a. Class Diagram

*[This part presents the class diagram for the relevant feature]*



### b. Class Specifications

*[Provide the description for each class and the methods in each class, following the table format as below]*

#### XYZ Class

*[Provide the detailed description for the class methods]*

| **No** | **Method** | **Description** |
| --- | --- | --- |
| *01* | *<method name>* | *<Description of the method, including the inputs, outputs & internal method processing>* |
|  |  |  |

#### ABC Class

***Class Methods***

*[Provide the detailed description for the class methods]*

| **No** | **Method** | **Description** |
| --- | --- | --- |
| *01* | *<method name>* | *<Description of the method, including the inputs, outputs & internal method processing>* |
|  |  |  |

### c. Sequence Diagram(s)

*[Provide the sequence diagram(s) for the feature, see the sample below]*



### d. Database queries

*[Provide the detailed SQL (select, insert, update...) which are used in implementing the function/screen]*

## 2. <Feature/Function Name2>

…

# III. Database Tables

## 1. <Table name 1>

*[Give some lines about the table here>>*

*[Table fields, in the form of table format as below]*

| **#** | **Field name** | **Type** | **Size** | **Unique** | **Not Null** | **PK/FK** | **Notes** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | Field name1 |  |  |  |  |  |  |
| 2 | Field name2 |  |  |  |  |  |  |

## 2. <Table name 2…>