DUY TÂN UNIVERSITY
International School

Capstone Project 1

CMU-SE 450

Database Design Document

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Green Big5 Information System

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Project Information

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Database Design Document

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V1.0	04/9/2021	Create Database Design
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Document Approvals

The following signatures are required for approval of this document.

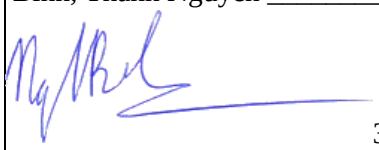
Doctor. Habil. Binh, Thanh Nguyen Mentor	Binh, Thanh Nguyen _____  31 - Nov- 2021
Chinh, Thai Huu Scrum master, DevTeam	10-Dec-2021
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TABLE OF CONTENT

1. Introduction

1.1. Purpose

Place information system's database design document describes the structure of the database and file structure of the system. Database Design document will introduce all attributes of the System that will help developer and tester base on this design to implement and test.

1.2. Goal

To create database tables most accurate.

1.3. Scope

This Database Design Document provides the basis for "GB5 Database design.

It describes both logical and physical definition, non-functional issues, and the database interfaces; storage aspects are defined in the physical database design sections.

The tables performance considerations requirements. The following topics are covered in this document:

- Assumptions and decisions on database design.
- Table column definitions.
- Interfaces and dependencies with other components.

The database design is composed of definitions for database objects derived by mapping entities to tables attributes to columns, unique identifiers to unique keys and relationships to foreign keys.

During design, these initial definitions are enhanced to support the functionality described in the functional specification/ user stories and defined in the primary and supporting modules of the application high level design.

1.4. Data storage platforms

- Data of application is stored in MongoDB

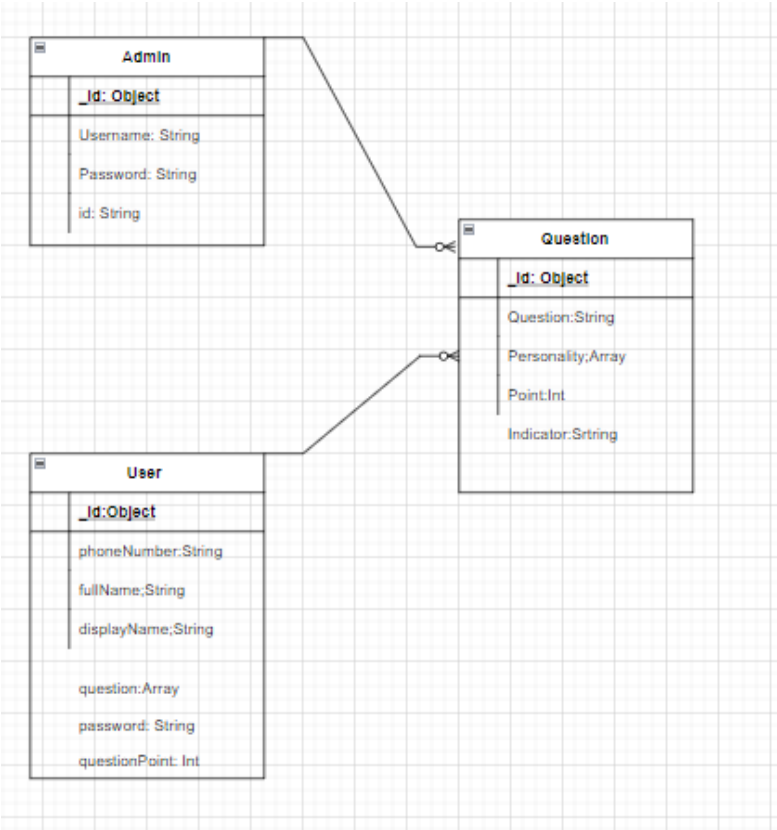
- In MongoDB, data structure is stored as a file system that takes advantage of the above functions and acts as a way of delivering over sharding[1].

2. Database Design

2.1. Table Overview

No.	Table name	Short Description
1	Admin	This table shows all information of Administrator
2	Users	This table shows all information of user
3	Questions	This table shows all information of question

2.2. Table Relationship Diagram



2.3. Detail

2.3.1. Admin

```
_id: ObjectId("61b5e01509e1aa0aed2b9083")
username: "NguyenTienLoc"
password: "TienLoc20"
id: "ancoijas2412kj"
```

Attributes	Datatype	Null	Description	Extra
_id	objectId	Not	Id of one record admin data	
username	String	not	Login name	
password	String	Not	Login passwords	
id	String	not	ID of admin	

2.3.2. Users

Attributes	Datatype	Null	Description	Extra
_id	objectID	Not	Id of one record a user data	
phoneNumber	String	Not	Phone number of a user	
fullName	String	Not	Full name of a user	
displayName	String	not	Display name of a user	
Question	Array		List questions that a user recieve	
id	String		Id of a object question	
dateTime	datetime		Datetime of a object question that user recieves	
questionDate	Array		List of question are sent by the dashboard and by once	
answer	String		User's answer of a question	
pointOpenness	Int		user's Openness point of a object question	
pointConscientious	Int		user's Conscientious point of a object question	
pointExtraversion	Int		user's Extraversion point of a object question	
pointNeuroticism	Int		user's Neuroticism point of a object question	
pointArgeeable	Int		user's agreeable point of a object question	

pointMultyplyOpenness	Int		Point multyply openness trait of a object question	
pointMultyplyConscientious	Int		Point multyply conscientious trait of a object question question	
pointMultyplyExtraversion	Int		Point multyply extraversion trait of a object question	
pointMultyplyNeuroticism	Int		Point multyply neuroticism trait of a object question	
pointMultyplyArgeeable	Int		Point multyply argeeable trait of of a object question	
password	String		Password user's	

2.3.3. Question

Attributes	Datatype	Null	Description	Extra
_id	ObjectId	not	Id of question	
indicator	String	not	Indicator of question	
question	String	not	Save string question of question	
personality	Array	not	List personality of question	
point	Object		The point of question	
pointHigh	Int		The point high of question	
ponitMedium	Int		The point medium of question	
pointLow	Int		The point low of question	
Openness	String	not	The trait opeeness of question	
Conscientious	String	not	The trait conscientious of question	
Extraversion	String	not	The trait extraversion of question	
Agreeable	String	not	The trait agreeable of question	
Neuroticism	String	not	The trait neurotticism of question	

3. References

[1] MongoDB: the application data platform | MongoDB

[2] diagrams.net