



**UTM**  
UNIVERSITI TEKNOLOGI MALAYSIA

SCSJ2203: Software Engineering

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## **System Documentation**

Kindergarten Management System

Version 3

Due Date

11<sup>th</sup> June 2020

School of Computing, Faculty of Engineering

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# Revision Page

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## **a. Overview**

This first version of our system documentation is divided into three sections which consists of System Architectural Design, Data Design and the User Interface Design.

In System Architectural Design, this system documentation shows the Architectural Style and Rationale and also the Component Model of the project. Data Design on the other hand contains the Data Description and the Data Dictionary of the project.

Last but not least, the User Interface Design shows the Overview of the User Interface and also some of the Screen Images that will be featured in the project.

## **b. Target Audience**

1. Staffs of Tadika Ihsan.
2. Parents and guardians of Tadika Ihsan students.
3. Developers.
4. System Analysts.

**c. Project Team Members**

<b>Team Member</b>	<b>Tasks assigned</b>	<b>Status</b>
Lee Chen Hong	Overview of User Interface (Webpage)	Complete
Aqilah Hanim Binti Mohd Taufik	Overview of User Interface (GUI) Report	Complete
Abdallah Malam	Data Design	Complete
Li Zhao Song	System Architectural Design	Complete

**d. Version Control History**

<b>Version</b>	<b>Primary Author(s)</b>	<b>Description of Version</b>	<b>Date Completed</b>
Version 1.0	Li Zhao Song	Completed the system proposal	16/04/2020
Version 2.0	Aqilah Hanim Binti Mohd Taufik	Completed the system documentation version 2.0	20/05/2020
Version 3	Lee Chen Hong	Completed the system documentation version 3.0	11/06/2020

## Table of Contents

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<b>NO</b>	<b>DESCRIPTION</b>		<b>PAGE</b>
<b>5</b>	<b>SYSTEM ARCHITECTURAL DESIGN</b>		
	5.1	Architectural Style and Rationale	1
	5.2	Component Model	2
<b>6</b>	<b>DATA DESIGN</b>		
	6.1	Data Description	3
	6.2	Data Dictionary	4
<b>7</b>	<b>USER INTERFACE DESIGN</b>		
	7.1	Overview of User Interface	5
	7.2	Screen Images	6-7

## 5. System Architectural Design

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### 5.1 : Architectural Style and Rationale

Layered architecture has been chosen. This architecture can organize the system into layers with related functionality associated with each layer. The lowest layer represents the core services that throughout the system. The higher layers are based on the services that provided from the lower layers. Our Kindergarten Management System can handle most of features under the existing situation but cannot ensure that there is no new module in the future. We keep the system sustainability and ability to deal with increment of user interaction. For present system, it focuses on two kind of users, teachers and parents. Teachers have much more functions to access than parents in term of authorization which can be modified if the interface is maintained.

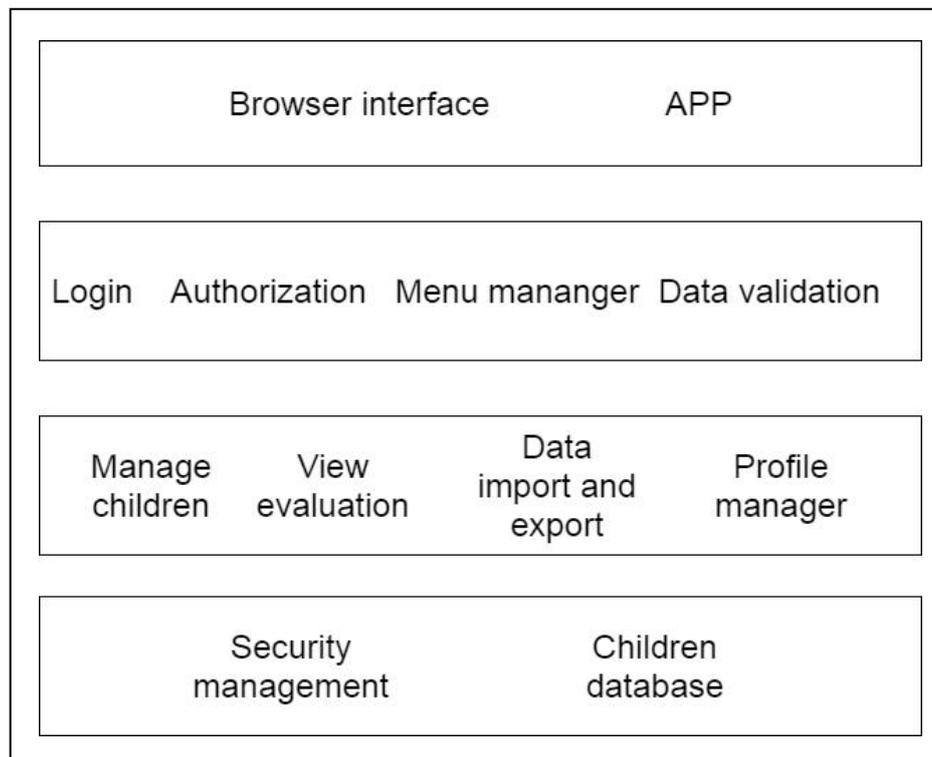


Figure 5.1 : Layered Architecture Diagram <Kindergarten Management System>

## 5.2 : Component Model

The software product is Kindergarten Management System. This software product will help kindergarten teacher to manage the information of children in kindergarten and the children's parent. This system also allow teacher to record the activity and evaluate the expression of the children in the activity. Parent also can trace the children learning progress in the system. This system will help kindergarten to save the cost in management of that data and make that job more efficiency. Parents also get the benefit to know what their child had learn from the kindergarten.

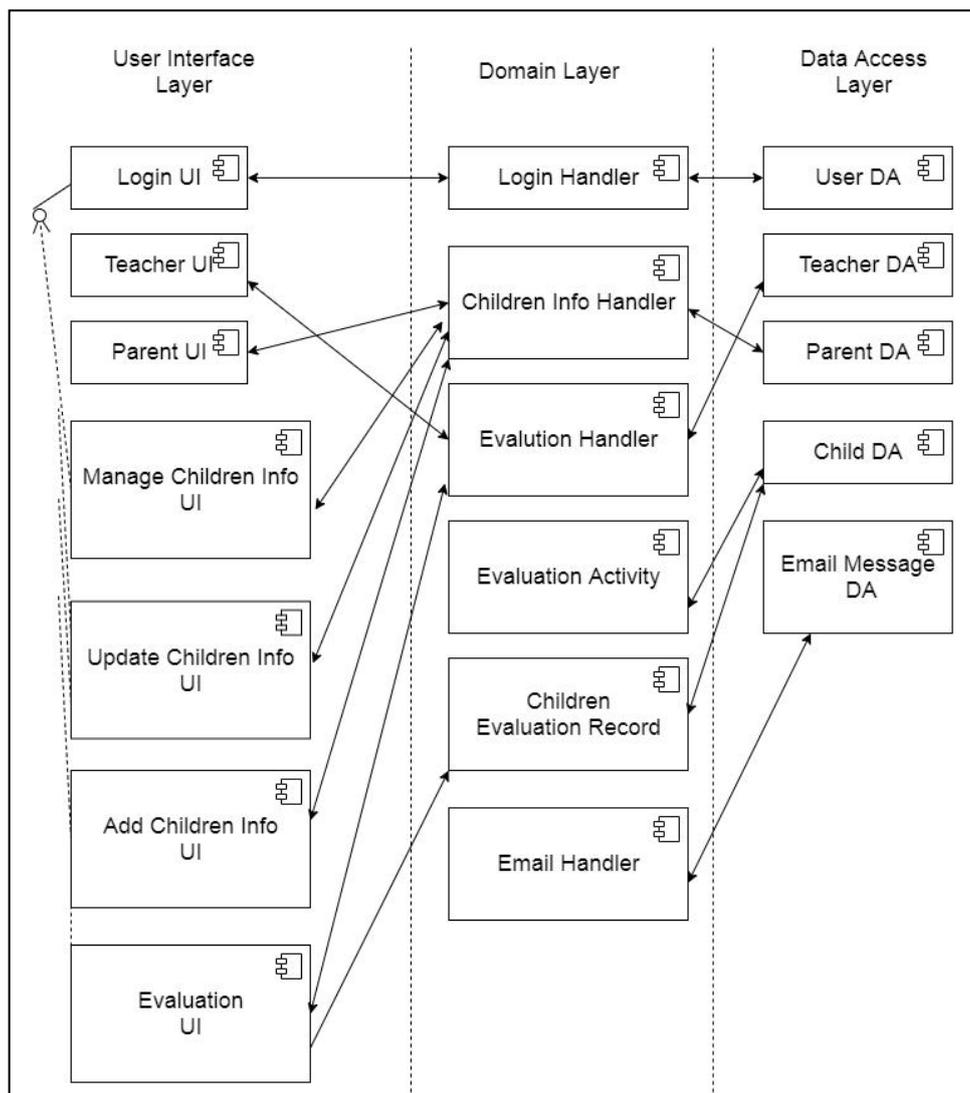


Figure 5.2 : Component Diagram <Kindergarten Management System>

## 6. Data Design

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### 6.1 : Data Description

Entity name	Description
Staff	Term used to describe the person in charge of the occurring use.
Child	Term that describe all the children who are registered at the kindergarten.
Teacher	Term that describe of people who teach to the student in the kindergarten.
Performance	Term for the record that stores student's performance such as the personality, school work and test.

### 6.2 : Data Dictionary

#### 6.2.1 Entity: Staff

Attribute	Description	Type
ID	Unique identifier for the staffs	VARCHAR (10)
Name	Name of the staff	VARCHAR (30)
password	Password to access the account of the staff.	VARCHAR (6)

#### 6.2.2 Entity: Child

Attribute	Description	Type
ID	Unique identifier for the Children	VARCHAR (10)
Name	Name of the child	VARCHAR (30)
Address	The location where the child resides	VARCHAR (6)

### 6.2.3 Entity: Teacher

Attribute	Description	Type
ID	Unique identifier for the teachers	VARCHAR (10)
Name	Name of the teacher	VARCHAR (30)
Address	The location where the teacher resides	VARCHAR (40)
PhoneNum	Teachers' contact numbers	NUMBER (15)

### 6.2.4 Entity: Course

Attribute	Description	Type
ID	Unique identifier for each course	VARCHAR (10)
Name	Name of the subject	VARCHAR (30)

### 6.2.4 Entity: Performance

Attribute	Description	Type
PerformanceRef	A Unique identifier for each student's performance	VARCHAR (10)
Feedback	A general feedback about a student's performance	VARCHAR (60)

## 7. User Interface Design

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### 7.1 : Overview of User Interface

- **Login Page :**

For Admins, Parents and Teachers to log into their personal accounts

- **Sign Up Page :**

For Parents to sign up to get their personal accounts so they could monitor their child.

- **Admin Homepage :**

For Admins to access all information accessible to them.

- **Teachers Homepage :**

For Teachers to access all information accessible to them.

- **Parents Homepage :**

For Parents to access all information accessible to them.

- **View Profile Page :**

For Admins, Parents and Teachers to view their personal profiles.

- **Create Evaluation Page :**

For Admins and Teachers to create evaluation of children.

- **Update Grade Page :**

For Teachers and Admins to change or replace the wrong grade for the child's evaluation.

- **View Child Page :**

For Admins to view a child's profile in the system.

- **Add Child Page :**

For Admins to add another child in the system.

- **Delete Child Page :**

For Admins to delete a child from the system.

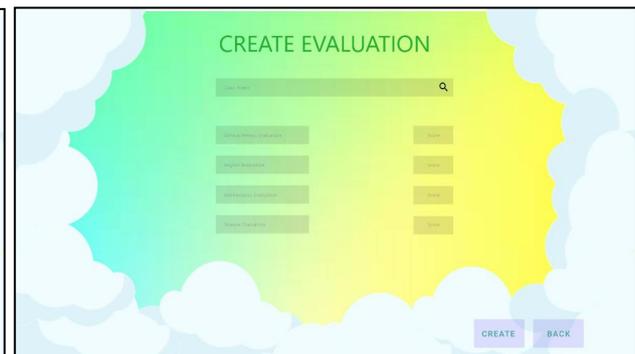
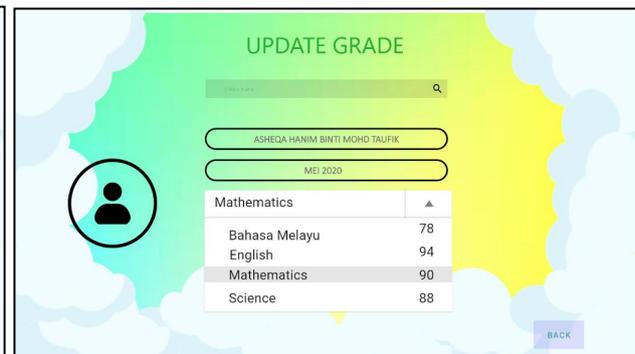
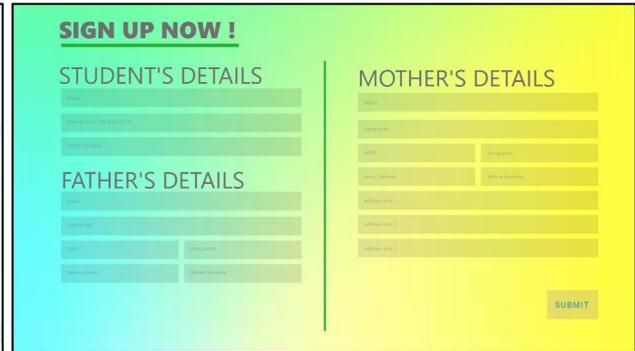
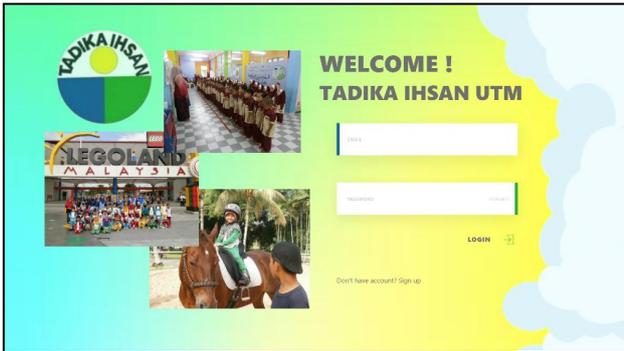
- **View Progress Page :**

For Admins, Parents and Teachers to view their children's progress in kindergarten.

- **Update Child Page :**

For Admins to update an existing child's profile in the system.

## 7.2 : Screen Images



### ADD CHILD

#### STUDENT'S DETAILS

Name:

DOB:

Gender:

Religion:

Parent's Name:

Parent's Address:

Parent's Phone:

Parent's Email:

Parent's Occupation:

Parent's Nationality:

Parent's ID:

Parent's Address:

Parent's Phone:

Parent's Email:

Parent's Occupation:

Parent's Nationality:

Parent's ID:

#### MOTHER'S DETAILS

Name:

DOB:

Gender:

Religion:

Parent's Name:

Parent's Address:

Parent's Phone:

Parent's Email:

Parent's Occupation:

Parent's Nationality:

Parent's ID:

Parent's Address:

Parent's Phone:

Parent's Email:

Parent's Occupation:

Parent's Nationality:

Parent's ID:

ADD
BACK



### VIEW CHILD

#### CHILD'S DETAILS

ASHEQA HANIM BINTI MOHD TAUFIK

MALAYSIAN

09/02/2015
FEMALE

#### FATHER'S DETAILS

MOHD TAUFIK BIN MAIDIN

MALAYSIAN

711211-12-1111
POLICE

0198765432

#### MOTHER'S DETAILS

NOR AFIZAH BINTI DERIS

MALAYSIAN

771230-01-0000
TEACHER

fads123@gmail.com
0123456789

NO 43, JALAN PENDIDIKAN 5, TAMAN UNIVERSITI,  
81300 SKUDAI,  
JOHOR

BACK

### UPDATE CHILD

#### STUDENT'S DETAILS

Name:

DOB:

Gender:

Religion:

Parent's Name:

Parent's Address:

Parent's Phone:

Parent's Email:

Parent's Occupation:

Parent's Nationality:

Parent's ID:

Parent's Address:

Parent's Phone:

Parent's Email:

Parent's Occupation:

Parent's Nationality:

Parent's ID:

#### MOTHER'S DETAILS

Name:

DOB:

Gender:

Religion:

Parent's Name:

Parent's Address:

Parent's Phone:

Parent's Email:

Parent's Occupation:

Parent's Nationality:

Parent's ID:

Parent's Address:

Parent's Phone:

Parent's Email:

Parent's Occupation:

Parent's Nationality:

Parent's ID:

UPDATE

BACK

### MY PROFILE

NOR AFIZAH BINTI DERIS

MALAYSIAN

771230-01-0000
TEACHER

fads123@gmail.com
0123456789

NO 43, JALAN PENDIDIKAN 5, TAMAN UNIVERSITI,  
81300 SKUDAI,  
JOHOR

PARENT OF : ASHEQA HANIM BINTI MOHD TAUFIK

BACK