Fine_Kindergarten Project

Use Case Specification

Version <4.0>

By Team FineApple

Revision History

Date	Version	Description	Author
<10/22/22>	<1.0>	First draft	김민규
<10/23/22>	<2.0>	Write details	김민규, 김민수, 이정중, 임주혁
<10/24/22>	<3.0>	Check typos, correction	김민규
<11/11/22>	<4.0>	Change use case diagram Remake document form	김민규, 김민수, 이정중, 임주혁

Use Case Specification

1. Introduction

1.1 Use Case Diagram
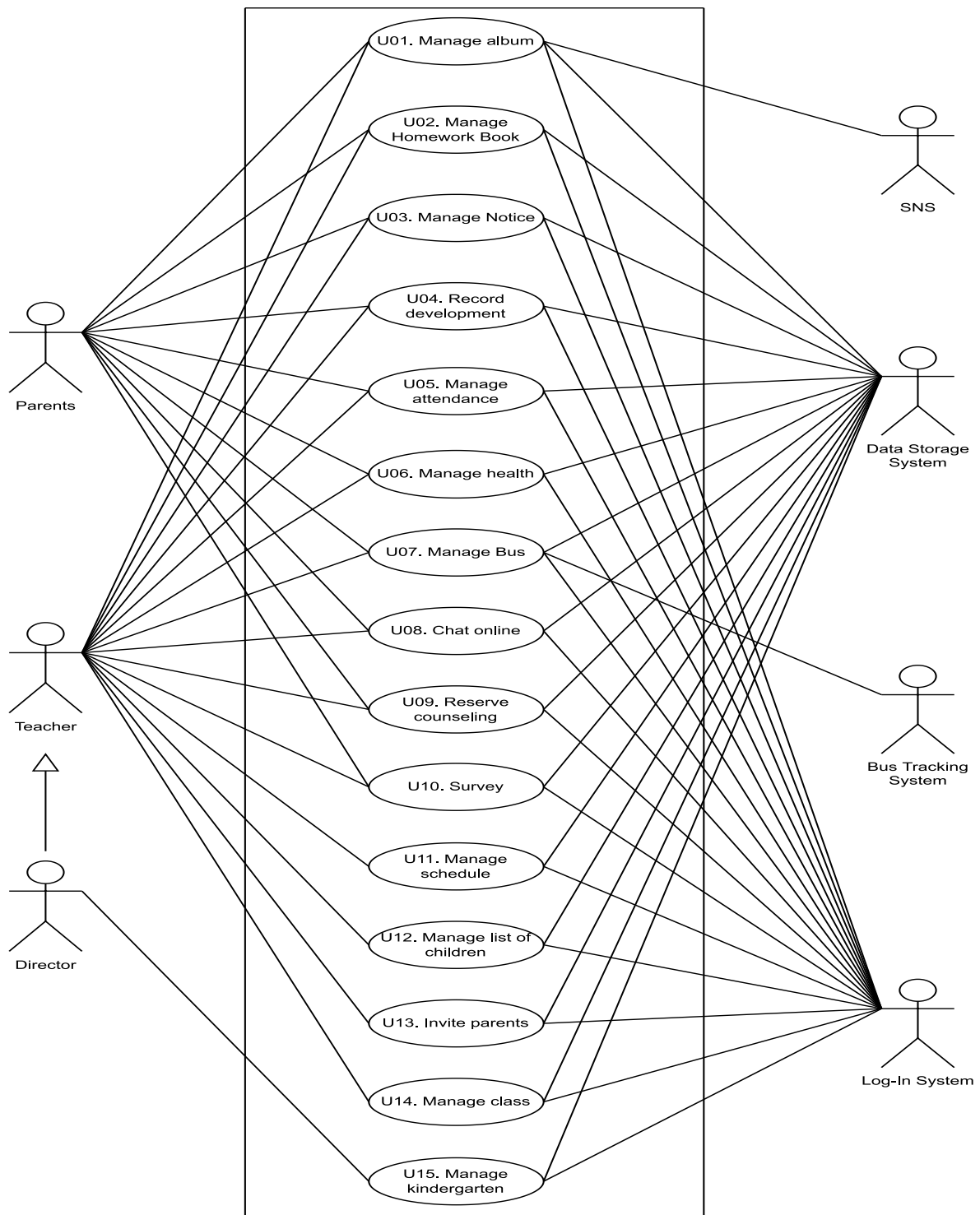
1.2 Glossary

SRS	Software Requirement Specification
SNS	Social Network Service
FAQ	Frequently Asked Questions
QnA	Question and Answer
Director	Head of kindergarten

2. Use Case Model

U01: Manage Album

U01.1 Description

User saves image and text in album.

U01.2 Associated Actors

Parents: Actor who views album.

Teacher: Actor who updates album.

Data Storage System: Service which saves album data.

SNS: Service which shares the album data.

Log-in System: Service which distinguishes users. (R2.1)

U01.3 Basic Flow

1. Teacher selects 'album' option.

2. The user uploads photo and text to system.

3. The system saves album data to Data Storage System.

4. The user selects another user to give access album.

5. The system saves access data to Data Storage System.

U01.4 Alternative Flows

1. User selects 'album' option.

2. The system shows photo and text data from Data Storage System.

3. The user views album data.

4. The user selects 'sharing' option.

5. The system makes sharing photo data to upload SNS from Data Storage System.

6. The user selects 'download' option.

7. The system makes downloadable photo file from Data Storage System.

U01.5 Precondition

User must be logged into the system.

U01.6 Postcondition

The album data is stored in the Data Storage System.

User shares album via SNS.

User downloads photo file from album.

U01.7 Linked Requirements

R4.1, R4.2, R4.3, R4.4, R4.5, R4.6

U02: Manage homework book

U02.1 Description

User writes homework book.

User reads homework book.

U02.2 Associated Actors

Parents: Actor who wants to read homework book.

Teacher: Actor who wants to write homework book.

Data Storage System: Service which stores homework book information.

Log-in System: Service which distinguishes user.

U02.3 Basic Flow

1. Teacher selects 'write homework book' option.

2. The system retrieves homework book data from Data Storage System.

3. User inputs homework data.

4. The system saves homework data to Data Storage System.

U02.4 Alternative Flows

1. User selects data to view homework book.

2. The system retrieves selected data's homework book data from Data Storage System.

3. The user views homework book.

U02.5 Precondition

User must be logged into the system.

U02.6 Postcondition

The homework book data is stored in the Data Storage System.

U02.7 Linked Requirements

R3.4

U03: Manage notice

U03.1 Description

User makes kindergarten's notice.

User views kindergarten's notice.

U03.2 Associated Actors

Parents: Actor who views kindergarten's data.

Teacher: Actor who updates kindergarten's data.

Data Storage System: Service which save kindergarten's notice data.

Log-in System: Service which distinguishes users.

U03.3 Basic Flow

1. Teacher selects 'new notice' option.

2. The system gets notice data from Data Storage System.

3. User inputs notice data.

4. The system saves new notice data to Data Storage System.

U03.4 Alternative Flows

1. User selects 'read notice' option.

2. The system gets notice data from Data Storage System.

3. User views kindergarten's notice.

U03.5 Precondition

User must be logged into the system.

U03.6 Postcondition

The notice data is stored in the Data Storage System.

U03.7 Linked Requirements

R1.4, R3.4

U04: Record Development

U04.1 Description

User records children's development data.

U04.2 Associated Actors

Parents: Actor who views child's development data.

Teacher: Actor who records child's development data.

Data Storage System: Service which saves development data.

Log-in System: Service which distinguishes users.

U04.3 Basic Flow

1. Teacher selects 'development' option.

2. The system gets children list from Data Storage System.

3. User selects one of the children to record development data.

4. The system gets development data from Data Storage System.

5. User inputs child's development data.

6. The system stores updated development data to Data Storage System.

U04.4 Alternative Flows

1. Parents selects 'development' option.

2. The system gets development data from Data Storage System.

3. User views development data of user's child.

U04.5 Precondition

User must be logged into the system.

U04.6 Postcondition

The development data is stored in the Data Storage System.

U04.7 Linked Requirements

R1.4, R1.8

U05: Manage Attendance

U05.1 Description

User records child's attendance state.

U05.2 Associated Actors

Parents: Actor who views attendance record.

Teacher: Actor who records attendance record.

Data Storage System: Service which saves child's attendance information.

Log-in System: Service which distinguishes users.

U05.3 Basic Flow

1. The system retrieves data of children from Data Storage Service.

2. Teacher selects date to input.

3. User inputs child's attendance state, attendance time, time to leave kindergarten.

4. The system saves input data in the Data Storage System.

5. User selects date to view data.

6. The system shows attendance data from the Data Storage Service.

U05.4 Alternative Flows

1. When user selects 'monthly report' option.

    - The system makes attendance monthly report form Data Storage Service.

U05.5 Precondition

User must be logged into the system.

U05.6 Postcondition

The attendance information is stored in the Data Storage Service.

U05.7 Linked Requirements

R1.1, R1.2, R1.3

U06: Manage Health

U06.1 Description

User records temperature of child.

User records dosing information.

User records diet information.

U06.2 Associated Actors

Parents: Actor who views temperature of child and records dosing information.

Teacher: Actor who records temperature of child and views dosing information.

Data Storage System: Service which stores temperature and dosing information.

Log-in System: Service which distinguishes users.

U06.3 Basic Flow

1. The system retrieves child data from Data Storage System.

2. Teacher inputs temperature of child and checks dosing information.

3. The system stores temperature information in the Data Storage System.

4. Teacher inputs diet information.

5. The system stores diet information in the Data Storage System.

U06.4 Alternative Flows

1. Parents selects date to view temperature of child.

2. The system retrieves child data from Data Storage System.

3. Parents updates child's dosing information.

4. The system saves changed child's dosing information in the Data Storage System.

5. Parents selects date to view diet of kindergarten.

6. The system shows diet information from Data Storage System.

U06.5 Precondition

User must be logged into the system.

U06.6 Postcondition

The temperature information is stored in the Data Storage Service.

The dosing information is stored in the Data Storage Service.

The daily diet information is stored in the Data Storage Service.

U06.7 Linked Requirements

R1.5, R1.6, R1.7, R1.9

U07: Manage Bus

U07.1 Description

1. User updates information of bus.

2. User tracks location of bus.

U07.2 Associated Actors

Parents: Actor who wants to track location of bus.

Teacher: Actor who wants to update bus's information and track bus location.

Data Storage System: Service which stores bus's information.

Log-in System: Service which distinguishes users.

Bus Tracking System: Service which transmits location of the bus.

U07.3 Basic Flow

1. Teacher selects 'Manage Bus' option.

2. The system retrieves bus information from Data Storage System.

3. The user inputs bus data to change.

4. The system saves changed data to Data Storage System.

5. User selects 'Bus tracking' option.

6. The system retrieves real-time bus location from Bus Tracking System.

U07.4 Alternative Flows

Not Applicable.

U07.5 Precondition

User must be logged into the system.

U07.6 Postcondition

The information of bus is stored in the Data Storage System.

User tracks real-time location of bus.

U07.7 Linked Requirements

R6.1, R6.2, R6.3

U08: Chat Online

U08.1 Description

User makes online real-time chatting with other users.

U08.2 Associated Actors

Parents: Actor who chats with other users online.

Teacher: Actor who chats with other users online.

Data Storage System: Service which stores and retrieves chat online data.

Log-in System: Service which distinguishes users.

U08.3 Basic Flow

1. User selects 'chat online' option.

2. The system retrieves users list from Data Storage System.

3. User selects another user to chat.

4. The system retrieves chatting history from Data Storage System.

5. User chats online.

6. The system saves chatting history to Data Storage System.

U08.4 Alternative Flows

1. When user makes typo during chatting.
      - The system corrects typo immediately.

U08.5 Precondition

User must be logged into the system.

U08.6 Postcondition

The chatting history is stored in the Data Storage System.

User makes online chatting.

U08.7 Linked Requirements

R3.1, R3.2, R3.3, R3.5

U09: Reserve Counseling

U09.1 Description

User makes counseling reservation.

User checks reservation history.

U09.2 Associated Actors

Parents: Actor who makes counseling reservation.

Teacher: Actor who checks reservation history.

Data Storage System: Service which stores and retrieves reserve counseling data.

Log-in System: Service which distinguishes users.

U09.3 Basic Flow

1. Teacher selects 'reserve counseling' option.

2. The system retrieves counseling history from Data Storage System.

3. User replies to user who made counseling reservation.

4. The system updates counseling applied information to Data Storage Service.

5. The information of counseling is stored in Data Storage Service.

U09.4 Alternative Flows

1. Parents selects 'reserve counseling' option.

2. The system retrieves list of teachers from Data Storage System.

3. User selects teacher to reserve counseling.

4. User inputs contents of counseling.

5. The system saves information of making counseling reservation to Data Storage Service.

U09.5 Precondition

User must be logged into the system.

U09.6 Postcondition

The information of counseling is stored in Data Storage Service.

U09.7 Linked Requirements

R3.2, R3.3, R5.1

U10: Survey

U10.1 Description

User makes survey.

User responds to the survey.

U10.2 Associated Actors

Parents: Actor who responds to the survey.

Teacher: Actor who makes the survey.

Data Storage System: Service which stores and retrieves survey data.

Log-in System: Service which distinguishes users.

U10.3 Basic Flow

1. Teacher select 'Survey' option.

2. The system shows list of survey from Data Storage System.

3. User selects survey already made.

      3-1. User checks the content of survey.

4. User selects 'survey making' option.

      4-1. The system retrieves all user list from Data Storage Service.

      4-2. User inputs survey title, contents of survey, list of users to respond.

      4-2. The Data Storage System stores information of survey.

U10.4 Alternative Flow

1. Parents select 'Survey' option.

2. The system shows list of surveys from Data Storage System.

3. User selects one of the surveys.

4. The system loads contents of survey from Data Storage System.

5. User responds to the survey.

6. The system saves survey data to Data Storage System.

7. When parents select 'survey making' option

　　　　-The system informs invalid user error.

U10.5 Precondition

User must be logged into the system.

U10.6 Postcondition

The information of survey is stored in Data Storage Service.

U10.7 Linked Requirements

R3.7, R3.8

U11: Manage Schedule

U11.1 Description

User manages schedule of kindergarten.

U11.2 Associated Actors

Teacher: Actor who needs to manage kindergarten's schedule.

Data Storage System: Service which stores kindergarten's data.

Log-in System: Service which distinguishes users.

U11.3 Basic Flow

1. User selects 'manage schedule' option.

2. The system retrieves kindergarten's schedule data from Data Storage System.

3. User inputs schedule information to be changed.

4. The system saves data to Data Storage System.

U11.4 Alternative Flow

Not Applicable.

U11.5 Precondition

User must be logged into the system as teacher.

U11.6 Postcondition

The changed schedule is stored in Data Storage Service.

U11.7 Linked Requirements

R2.8

U12: Manage List of Children

U12.1 Description

User manages list of children of kindergarten.

U12.2 Associated Actors

Teacher: Actor who needs to manage kindergarten's whole students list.

Data Storage System: Service which stores child's data.

Log-in System: Service which distinguishes users.

U12.3 Basic Flow

1. The system shows the items for managing the kindergarten children list.

2. User selects what wants to change.

3. The system retrieves child list information from Data Storage System.

4. User inputs child information to change.

5. The system stores changed information in the Data Storage Service.

U12.4 Alternative Flow

Not Applicable.

U12.5 Precondition

User must be logged into the system as teacher.

U12.6 Postcondition

The changed child's data is stored in Data Storage System.

U12.7 Linked Requirements

R2.6

U13: Invite Parents

U13.1 Description

User invites another user.

U13.2 Associated Actors

Teacher: Actor who needs to invite parents.

Data Storage System: Service which stores invitation information.

Log-in System: Service which distinguishes users.

U13.3 Basic Flow

1. The system shows 'Invite Parents' option.

2. User selects 'Invite Parents' option.

3. The system shows blank to input parent's mobile number.

4. User inputs mobile number, parent's name, child's name of target parent.

5. The system sends message to the number entered.

6. The Data Storage System saves invitation information.

U13.4 Alternative Flow

Not Applicable.

U13.5 Precondition

User must be logged into the system as teacher.

U13.6 Postcondition

The invitation data is stored in Data Storage System.

U13.7 Linked Requirements

R2.7, R3.6

U14: Manage Class

U14.1 Description

User manages class of kindergarten.

U14.2 Associated Actors

Teacher: Actor who needs to manage class.

Data Storage System: Service which stores kindergarten's data.

Log-in System: Service which distinguishes users.

U14.3 Basic Flow

1. The user selects 'manage class' option.

2. The system retrieves class information from the Data Storage System.

3. User inputs the information to be changed.

4. The system stores the information entered in the Data Storage System.

5. The system records using system time in the Data Storage System.

6. When kindergarten closed, the system shuts down.

U14.4 Alternative Flows

Not Applicable.

U14.5 Precondition

User must be logged into the system as teacher.

U14.6 Postcondition

The changed information is stored in Data Storage System.

U14.7 Linked Requirements

R2.4, R2.9, R7.1, R7.2, R7.3, R7.4, R8.1

U15: Manage Kindergarten

U15.1 Description

User can change the name of kindergarten.

User can manage the list of teachers.

User can change director of kindergarten.

U15.2 Associated Actors

Director: Actor who needs to change kindergarten's information.

Data Storage System: Service which stores information.

Log-in System: Service which distinguishes users.

U15.3 Basic Flow

1. The system shows options. (Options: change the name of kindergarten, manage the list of teachers, change director of kindergarten)

2. User selects one of the options.

3. The system retrieves information from the Data Storage System.

4. User inputs the information to be changed.

5. The system stores the information entered in the Data Storage System.

U15.4 Alternative Flows

1. When user selects 'change the name of kindergarten' option at step 1 in basic flow.

- The user inputs the name of kindergarten at step 4 in basic flow.

2. When user selects 'manage the list of teachers' option at step 1 in basic flow.

- The user inputs the information to change about teachers at step 4.

3. When user selects 'change director of kindergarten' option at step 1 in basic flow.

- The user inputs the information of another user to be next director at step 4.

4. When user inputs invalid information at step 4.

    - The system informs the user incorrect input error.

U15.5 Precondition

User must be logged into the system as a director.

User selected director's option.

U15.6 Postcondition

The changed information is stored in Data Storage System.

U15.7 Linked Requirements

R2.2, R2.3, R2.5