

## Iteration II

Trello Link: <https://trello.com/b/GXCvTyOf/4-amigos>

Web: <https://www.your4amigos.com/>

Git: <https://github.com/YzkGao/CSI-3471-team-project-4-amigos->

## Team: 4 amigos

Members:

Yangzekun Gao, Jingke Shi, Zhengyan Hu, Maiqi Hou

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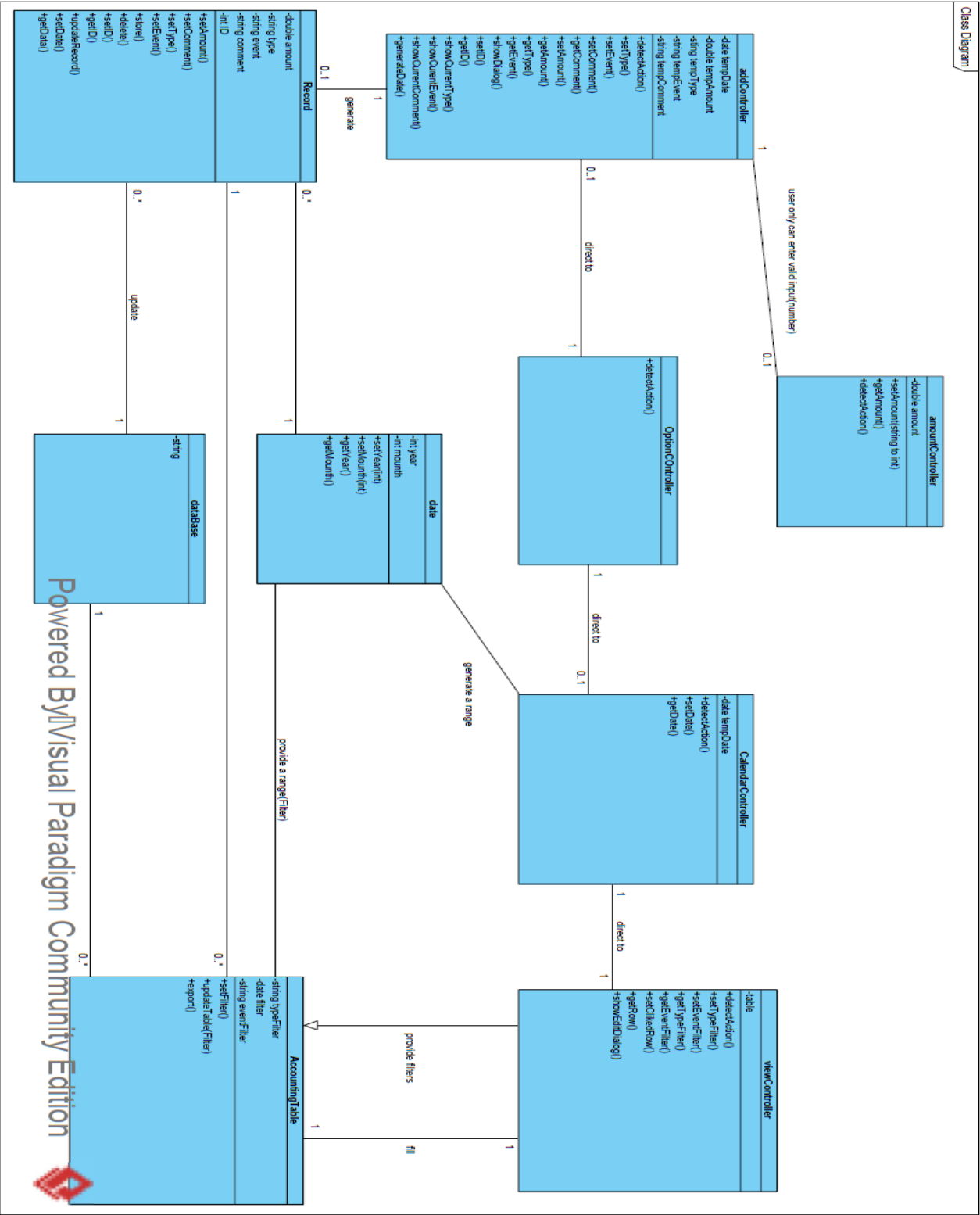
## Project Vision

We are planning to make an accounting application. It provides functions for users to check their daily expense or income records. A record is composed by date, event, type, amount, and additional comments. The date indicates the time of the record, event indicates the scene of the record, type indicates that is the record a expense or income. The amount shows that how much money users expended or earned in the record, and we allow users to add an additional comment.

### Functions:

- (1) Adding records: It gives user a way to add new records.
- (2) Viewing records: It allows users to view their records in a fixed time range. Users are able to select the time range they want. The application will generate a table to show the records. In addition, we will show some statistical data, such as total balance, total income, and total expenses.
- (3) Viewing by using filters: We allow users to minimize the table by adding some filters, such as which event or type they only want to view. Also, the statistical data will update.
- (4) Export: We allow users to export the table based on applied filters in a readable way to a certain file.
- (5) Edit: Users can edit records while they are viewing.
- (6) Delete: Users can delete records while they are viewing.

# Class Diagram



# GRAPS

## **Class Record:**

Class responsibility:

1. Collection to record information from user
2. High coupling with database
3. Record will store amount, comment, type, event, store.
4. record store to database
5. change by the accounting table

## **Class database:**

Class responsibility:

1. Collection to record information from user
2. low coupling with Record
3. database will store a lot of records of the user.

## **Class AccountingTables:**

1. Load the table from database
2. Edit the database
3. Create Record for edit database
4. Table Filter by viewController.
5. Delete a record
6. high coupling with Record

## **Class addController:**

1. Create a record with information from users
2. Add record to database.
3. high coupling with Record

**Class record():**

Class responsibility:

1. This class is implemented to store various data such as amount, event, type, comment.

Double getAmount():

Return the amount.

String getEvent():

Return the Event.

String getType():

Return the Type.

int getID():

Return the Event.

void getID():

change the ID.

void setAmount():

Change the amount

void setEvent():

Change the Event.

void setType():

Change the Type.

## **Class date**

Class responsibility:

1. store date information set by user

Void setYear( )

This method receive and set the related year by User

Void setMonth( )

This method receive and set the related month by User

Void setDay( )

This method receive and set the related day by User

Void getYear( )

This method get the related year to User

Void getMonth( )

This method get the related month to User

Void getDay( )

This method get the related day to User

## **Class calendarPage**

Class responsibility:

1. show the date range and related information to User
2. Redirect to other Frames

Void getYear( )

This method get the related year to user

Void getMonth( )

This method get the related month to user

Void getDay( )

This method get the related day to user

Void UI( )

This method initializes our calendar Page frame of software and set it visible to user

## **Class viewPage**

Class responsibility:

1. detect menu and label supplied to user
2. Redirect to other frames

Void UI( )

This method initializes our calendar Page frame of software and set it visible to user

Void detectAction( )

This method will detect menu that chose by user:

1. If eventFilter chose, filter records by events
2. If typeFilter chose, filter records by type
3. If export chose, export the records filtered.

## **Class accountingTable**



Class responsibility:

1. Store the collections of records by array list
2. Implementation of JTable for the collections of array list
3. Export method implementation

Void fillTable( )

This method will load local files of record

This method also generates JTable

Void update Table( )

This method will add new records to the collection array list

Void getRecord( )

This method will return records in range given by user

Void setRecord( )

This method will set records revised by user

Void export( )

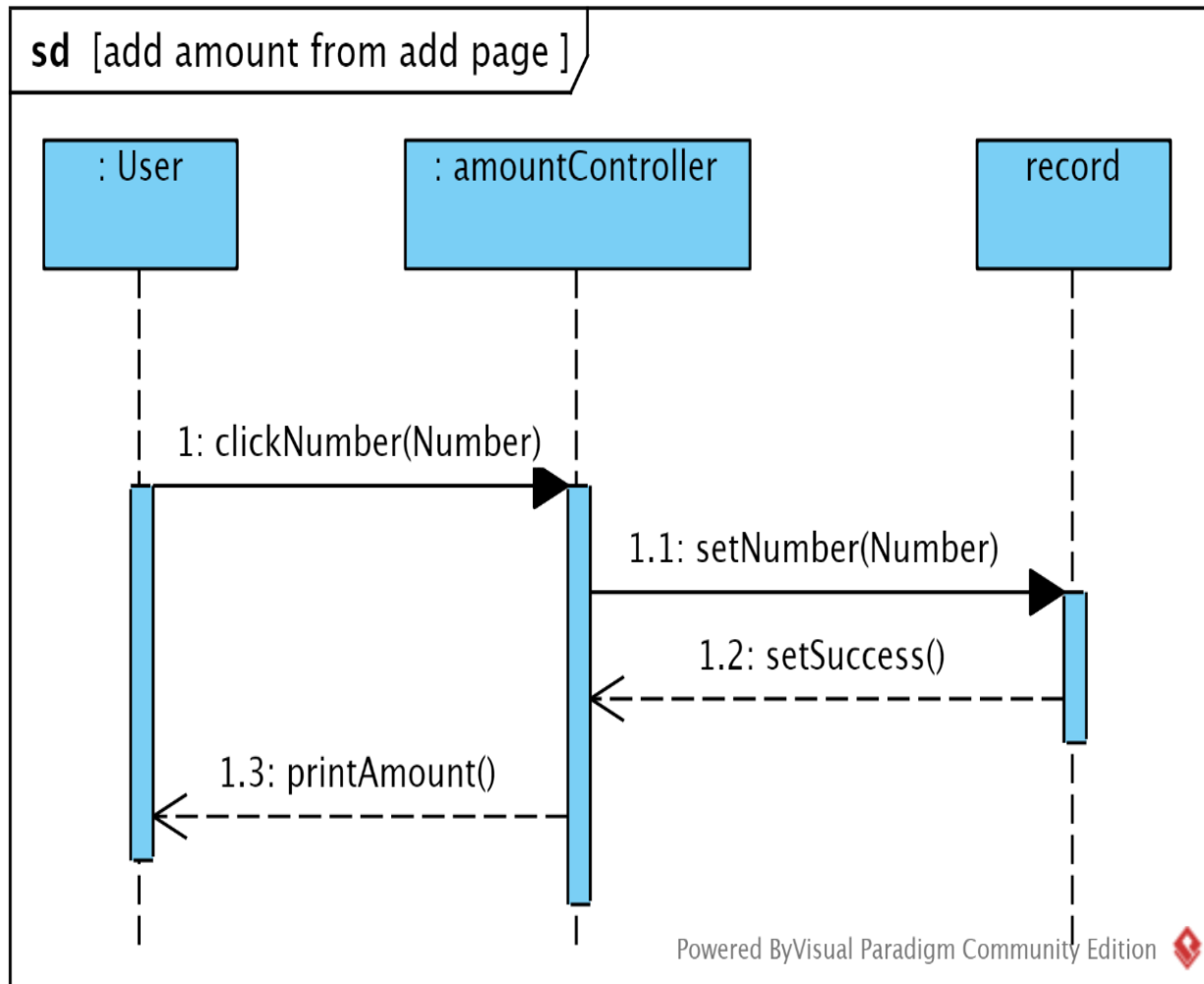
This method will export CSV file in range

Void getTable( )

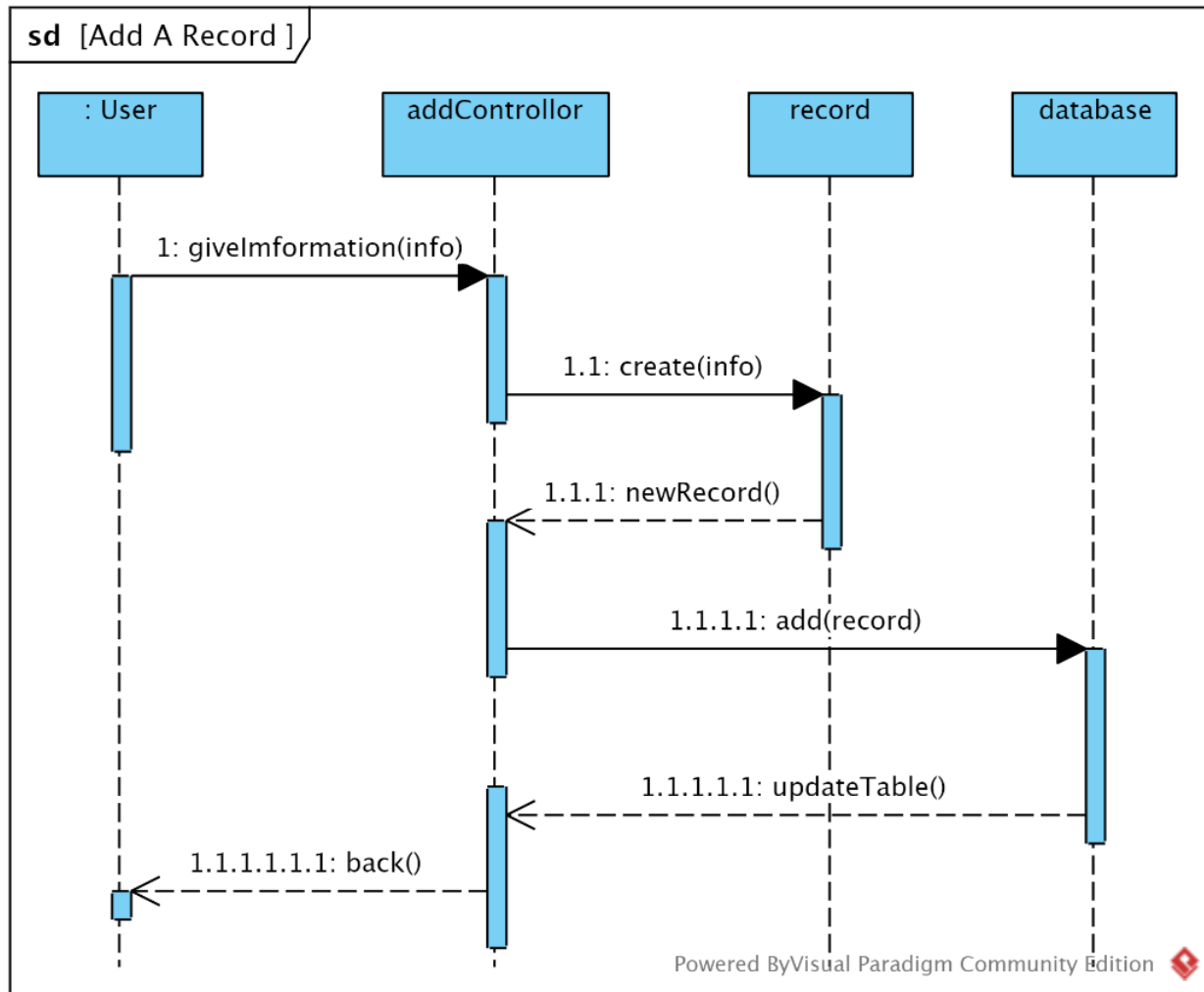
This method will return the table

# Sequence Diagram

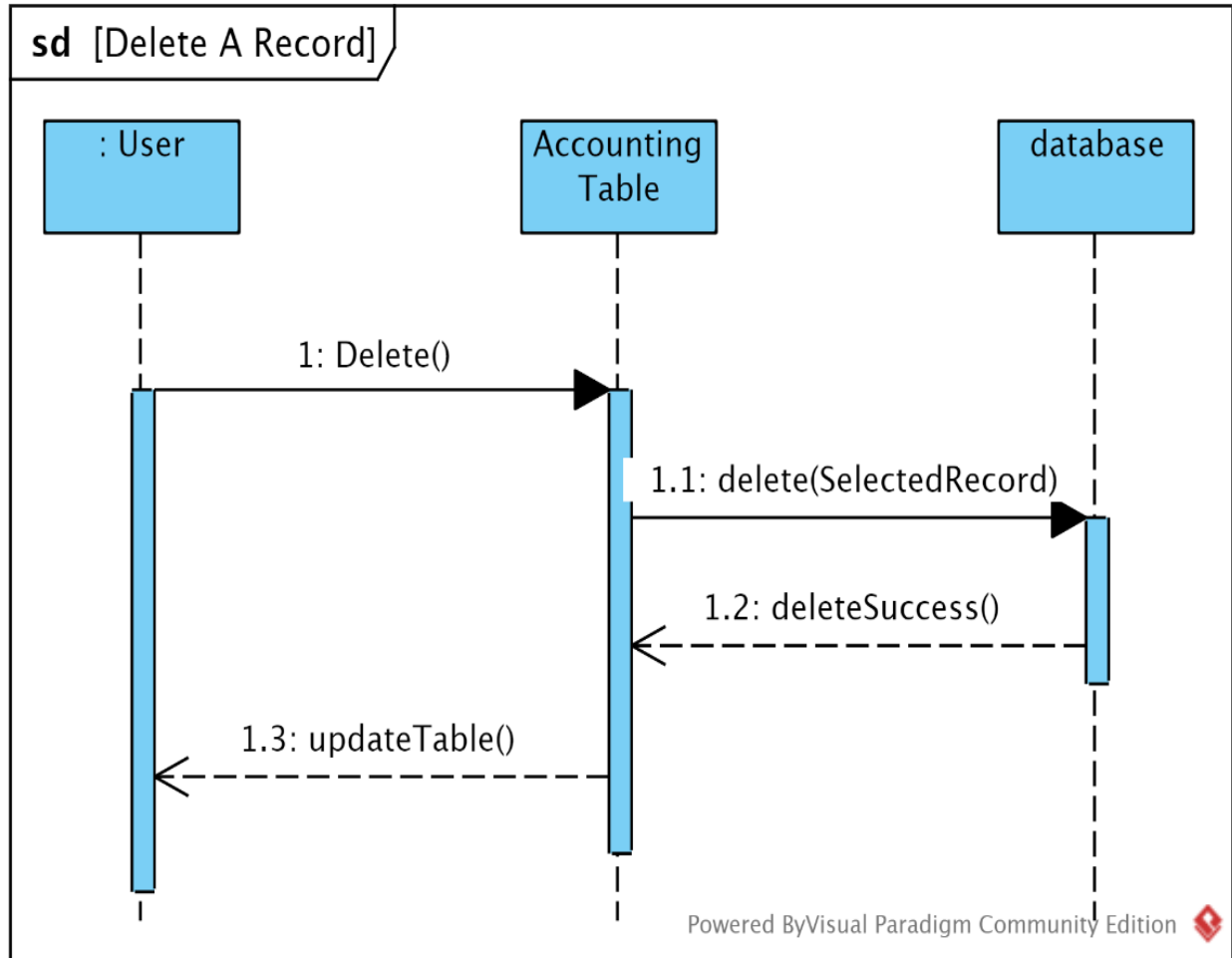
## Add Amount-- SD



## AddRecord – SD

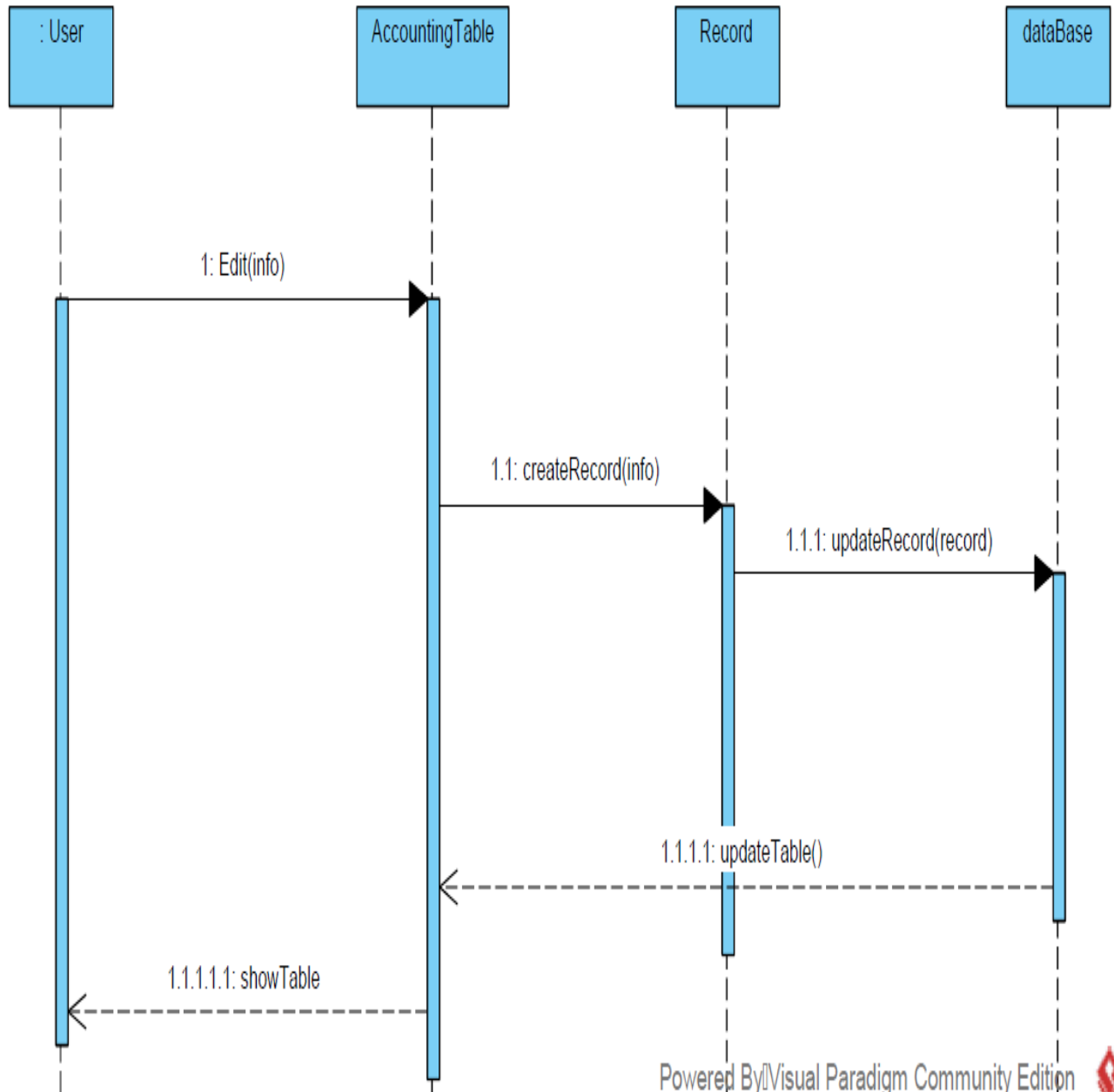


## Delete Record -- SD

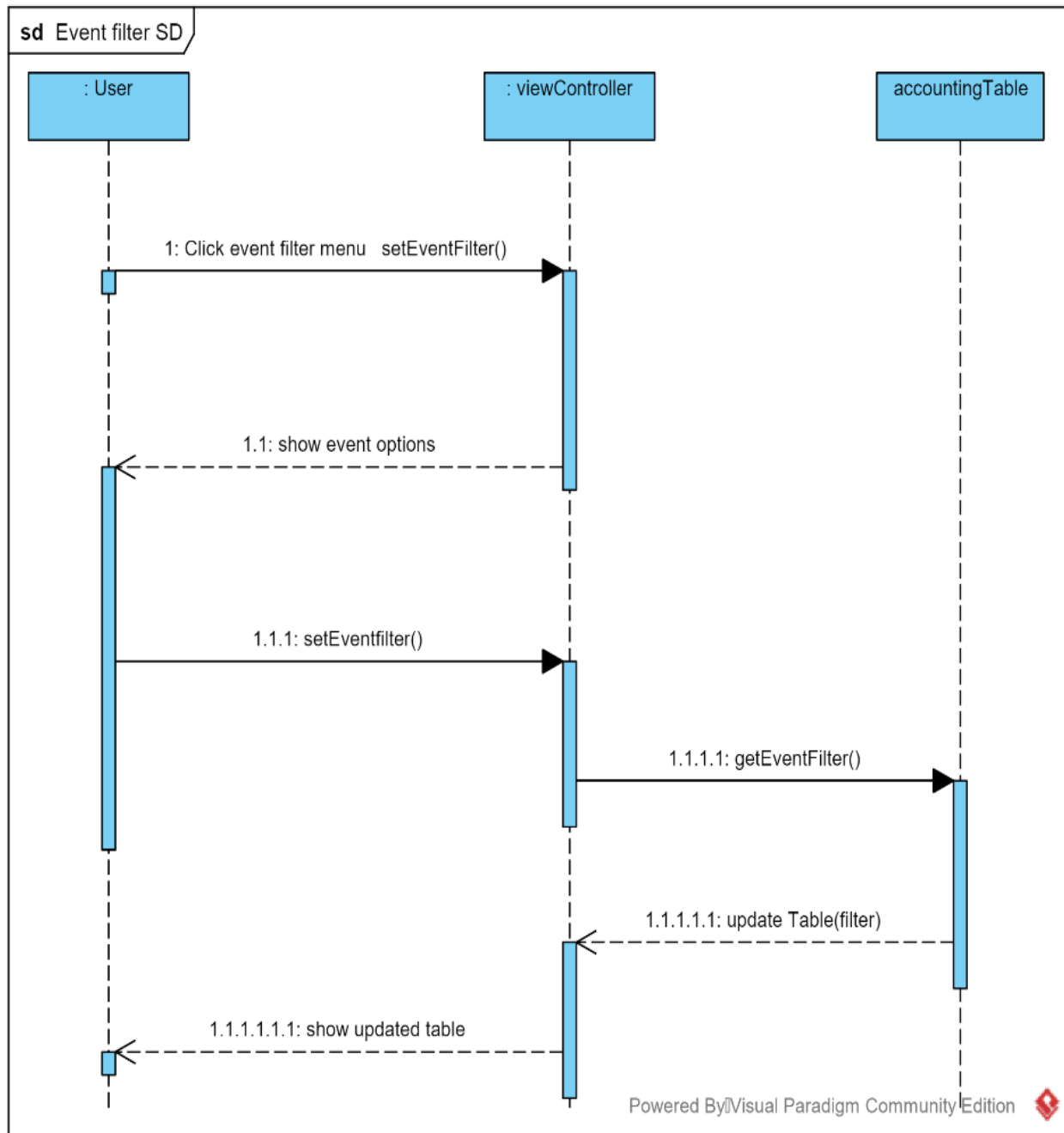


## Edit table -- SD

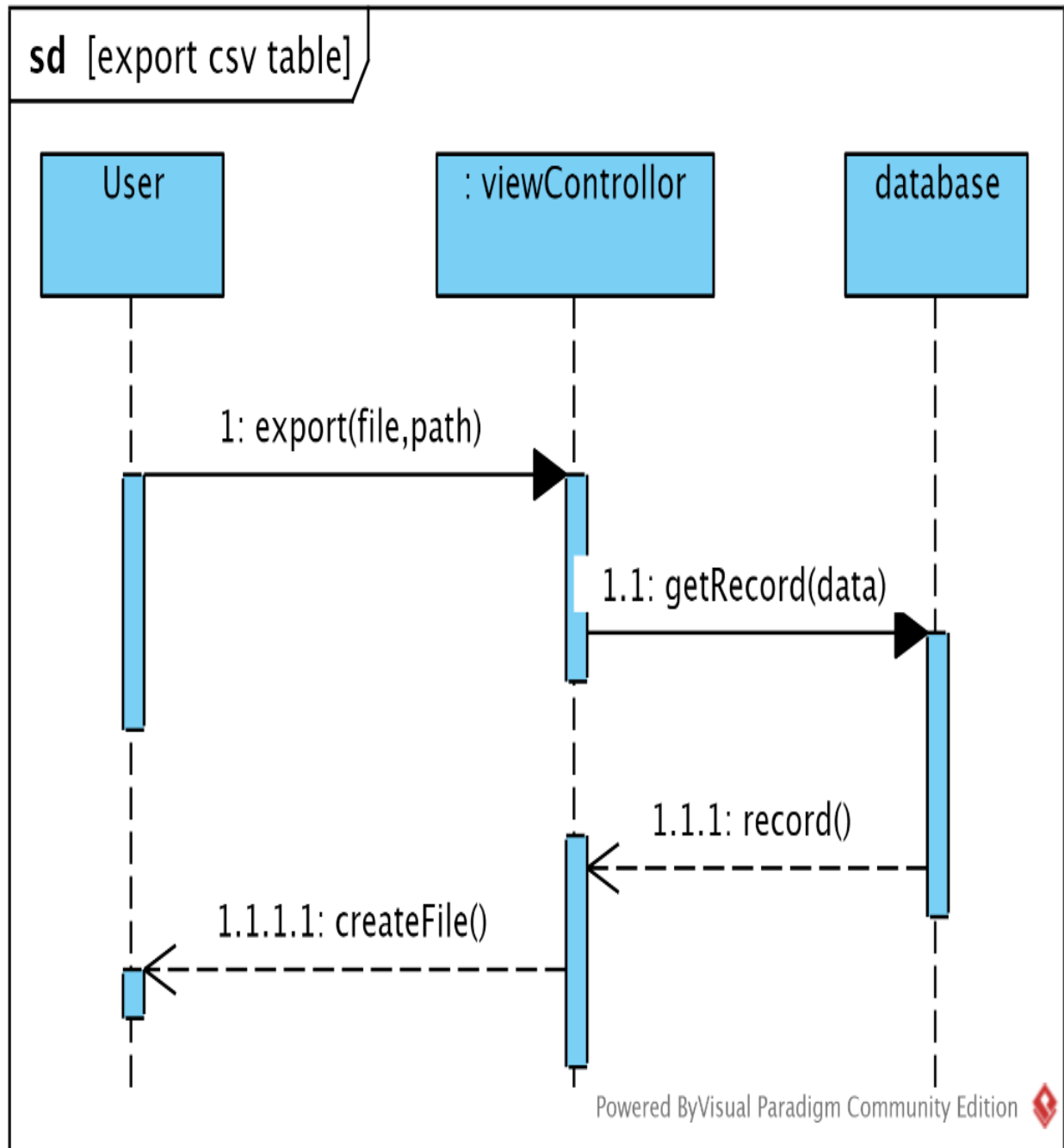
sd Edit table



## Event filter – SD

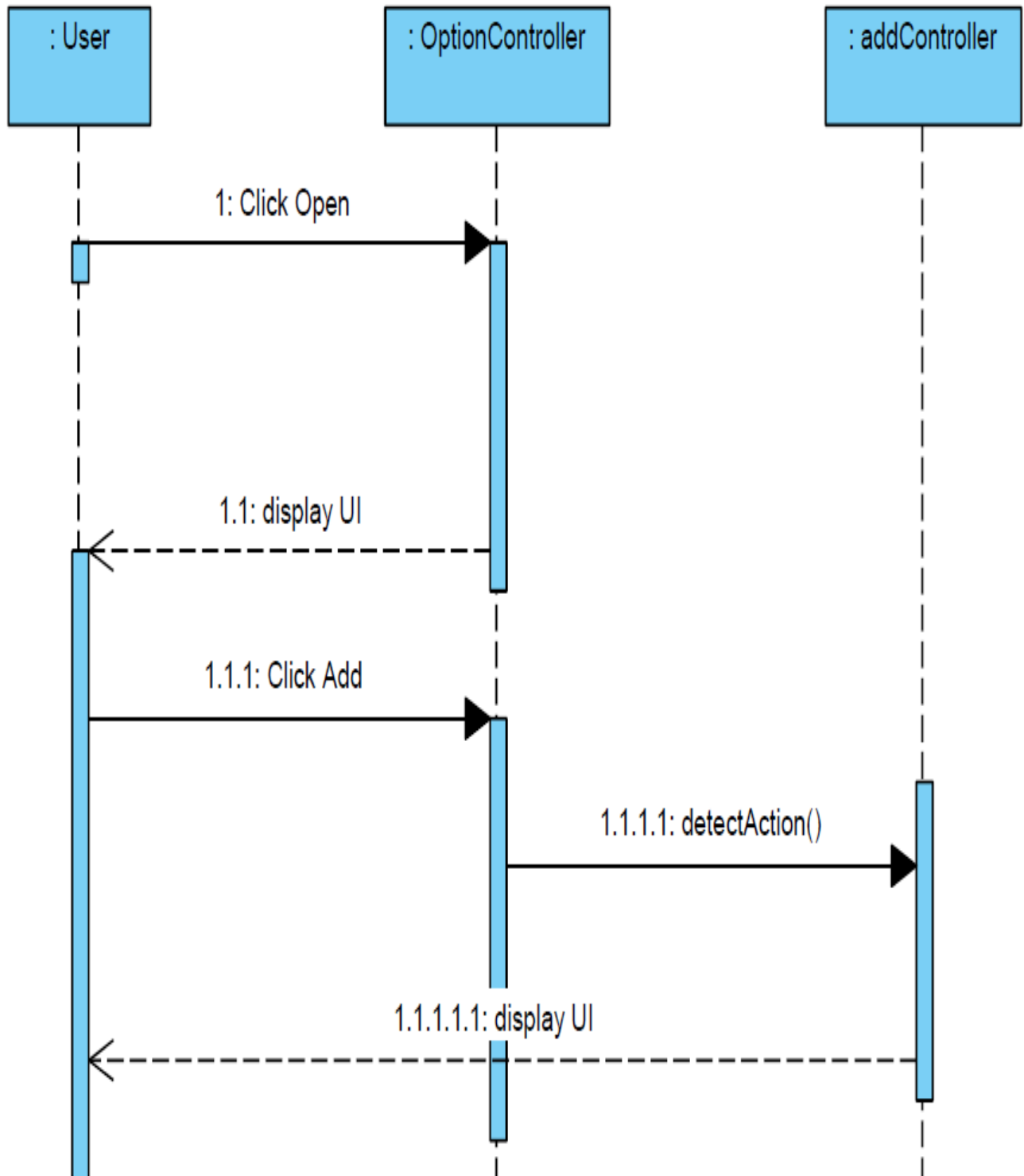


## ExportTable – SD



## Main page to add page – SD

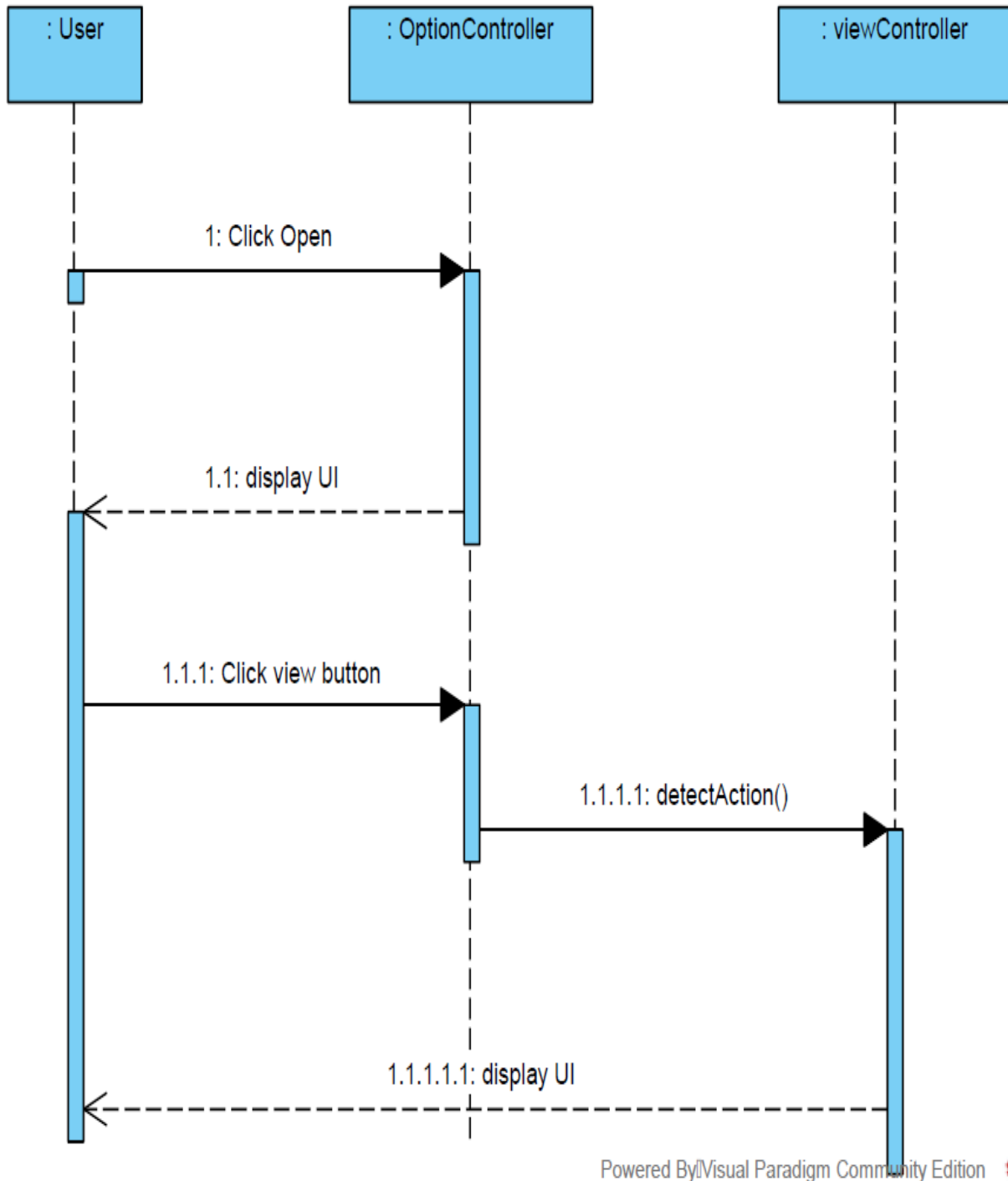
sd MainPage to AddPage SD





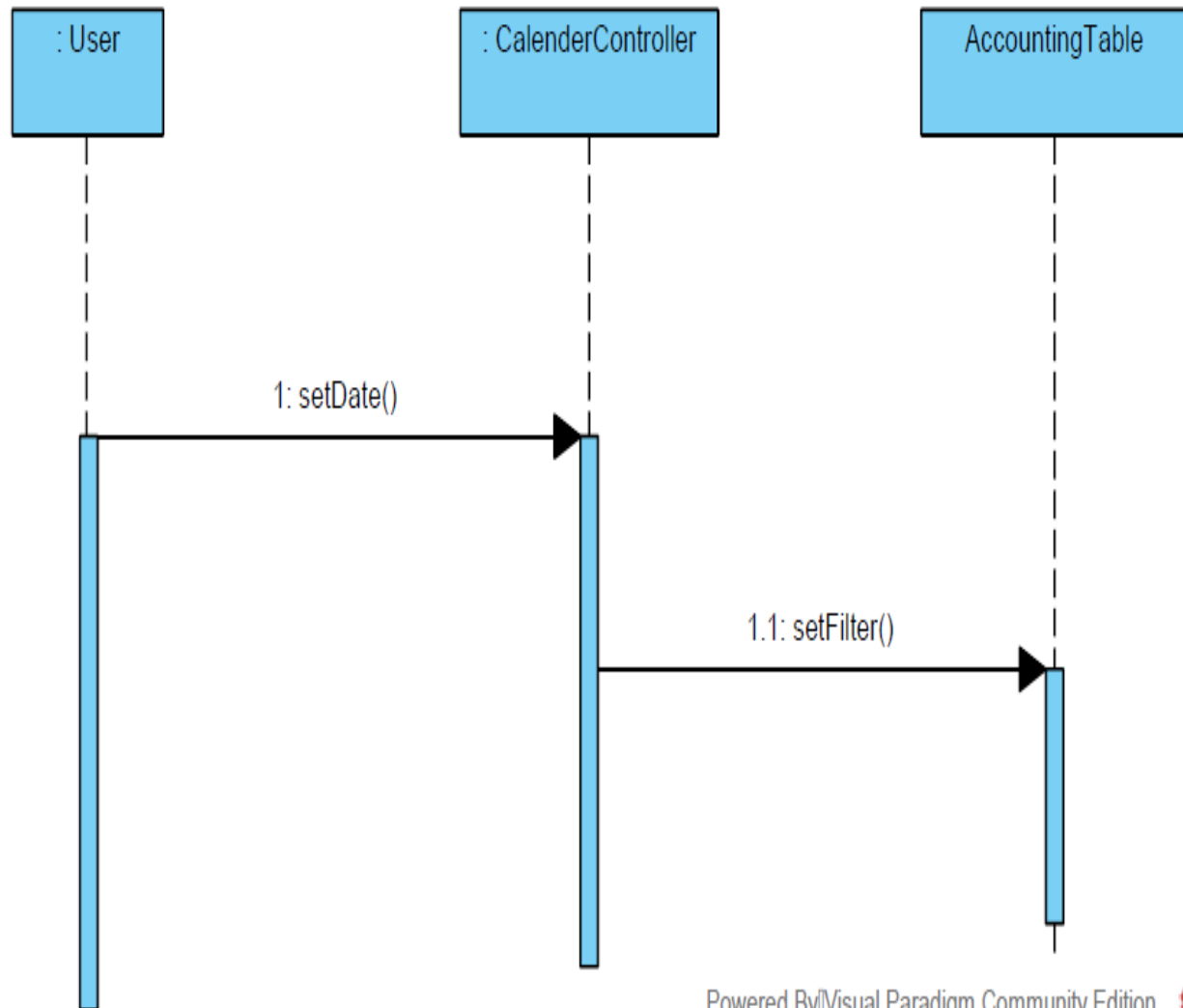
## Main page to view page – SD

sd Main page to view page SD

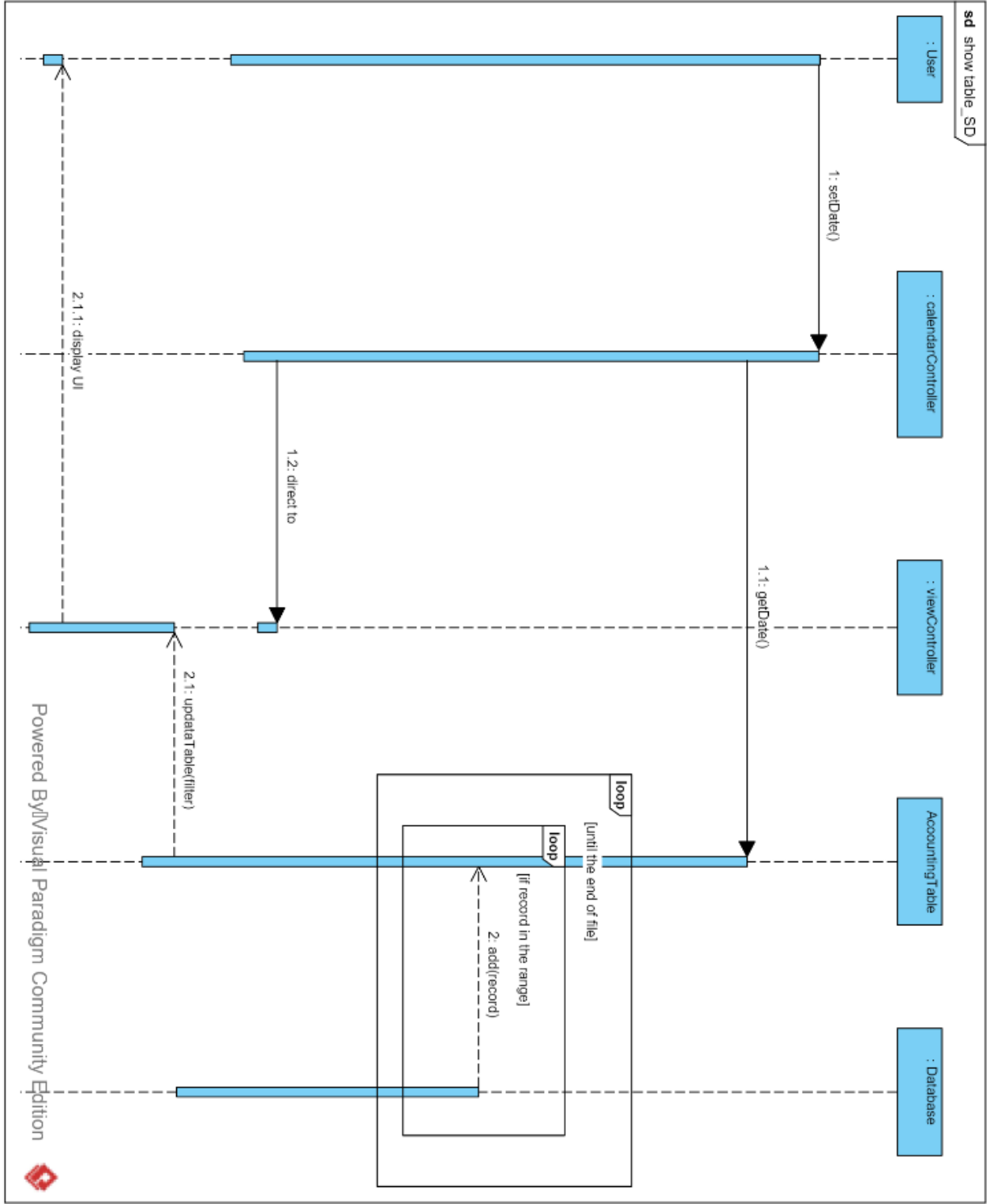


## Select data range from calendar – SD

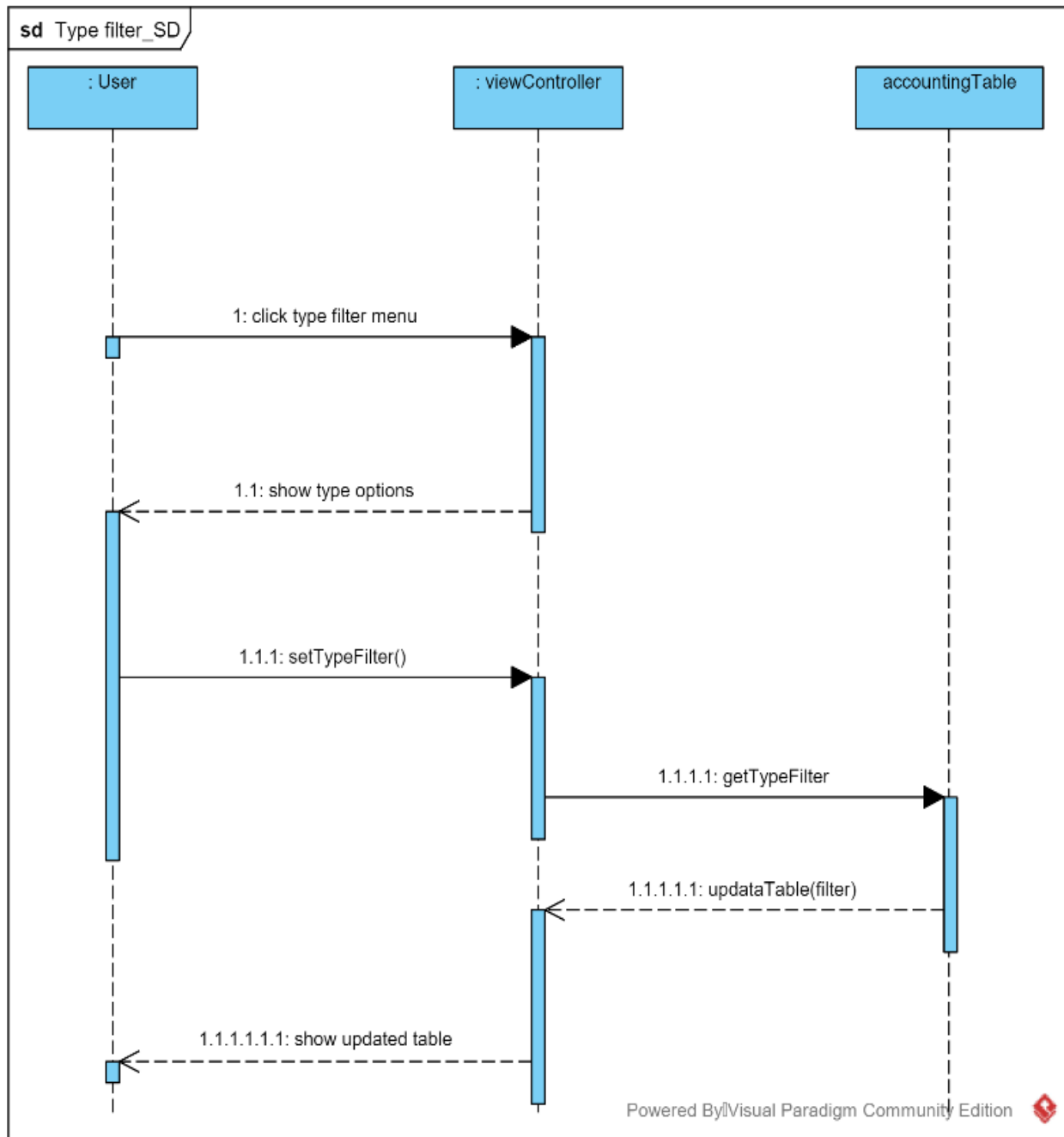
sd Select data range from calendar



# Show table – SD



## Typefilter – SD



# Test Plan

## Testing plan

### 1. OptionController

(1) detect user input

### 2.AddController

(1) Get record type

(2) Get record event

(3) Edit amount dialog work properly

(4) Get amount

(5) Get comment

(6) Store record to database

(7) Set record type

(8) Set record event

(9) Set amount

(10) Set comment

(11) generate ID

### 3. calendarController

(6) Set date

(7) Get date

### 4. viewController

(1) Set event filter

(2) Get event filter

(3) Set type filter

(4) Get type filter

(5) Set row

(6) Get row

5.accountingTable

(1) Test if it can export data

(2) Test Updating table

6. amountController

(1) Test conversion between string and integer

7. record

(1) Set record type

(2) Set record event

(3) Set amount

(4) Set comment

(5) Get type

(6) Get event

(7) Get amount

(8) Get comment

8. UI

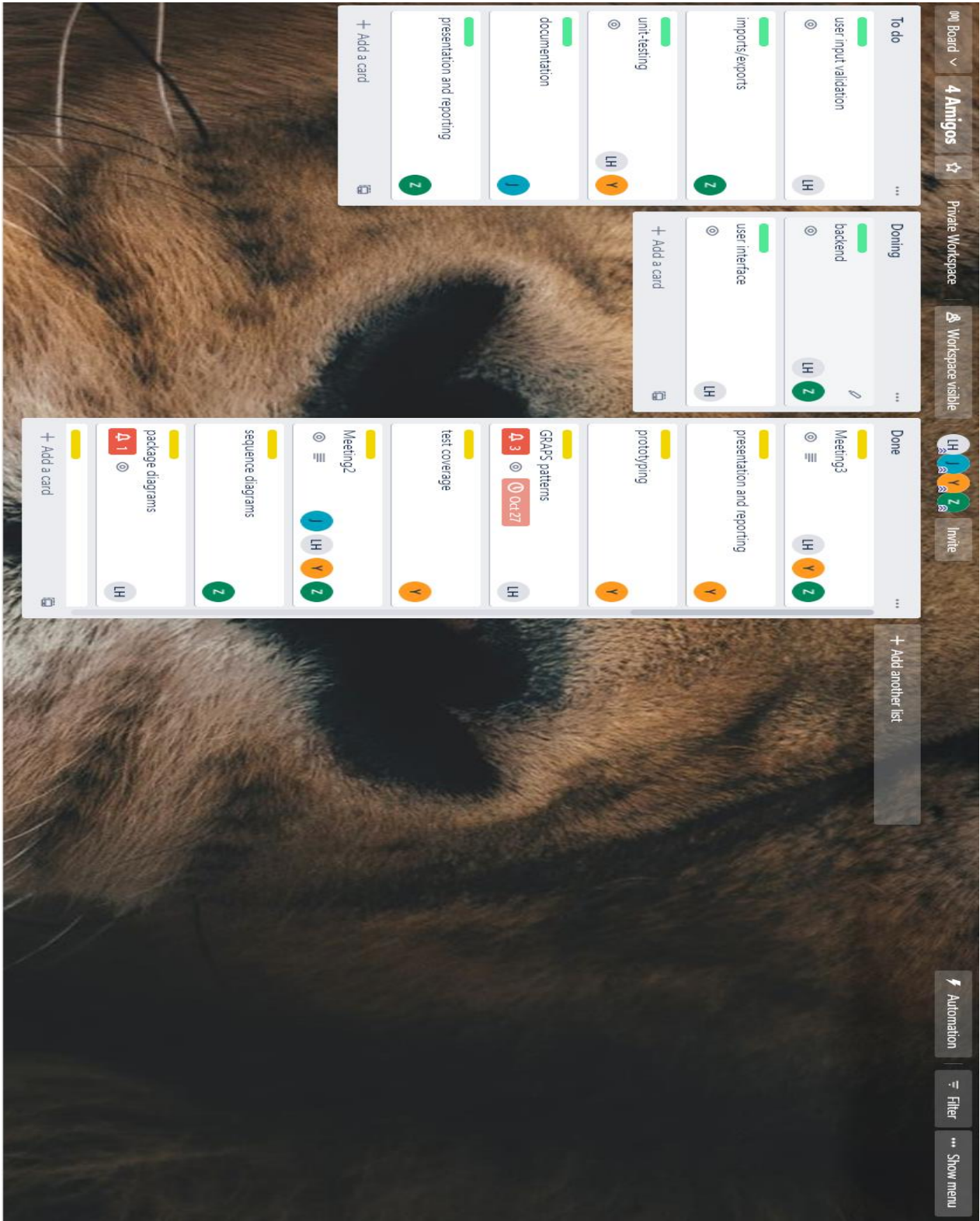
(1) Every button work properly

(2) Can work on different computer system

(3) Link to other frame properly

(4) Close and display properly

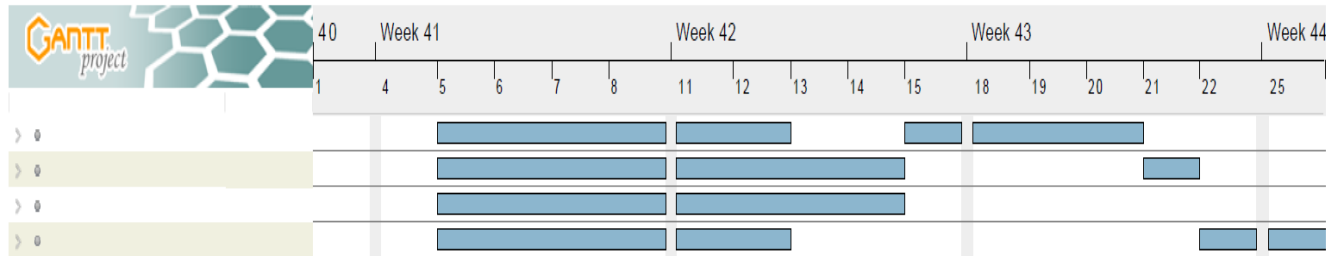
# Trello



## Gantt

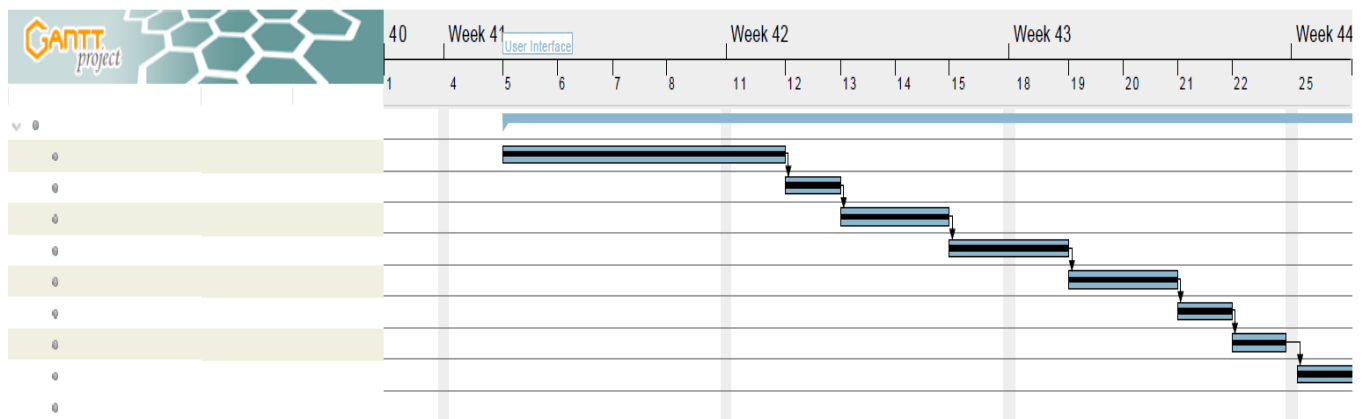
### Resources Chart

5



## Gantt Chart

4



## Tasks

2

Name	Begin date	End date
Iteration 2	2021/10/5	2021/10/27
User Interface	2021/10/5	2021/10/11
Revised iteration 1	2021/10/12	2021/10/12
design model	2021/10/13	2021/10/14
sequence diagrams	2021/10/15	2021/10/18
package diagrams	2021/10/19	2021/10/20
GRAPS patterns	2021/10/21	2021/10/21
test coverage	2021/10/22	2021/10/22
prototyping	2021/10/25	2021/10/26
presentation and reporting	2021/10/27	2021/10/27



# Team Time Record

## Team 4 amigos Time Record

### Meetings:

- Sunday, October 24, 2021 (5 PM – 7 PM)
- Wednesday, October 27, 2021 (1:25 PM – 6 PM)
- Friday, October 29, 2021(2:30 PM – 7Pm)

### Individual Hours:

- Yangzekun Gao:  $10 + 9.25 + 5 = 24.25$  hrs.
- Maiqi Hou:  $9 + 8.75 + 5 = 23.75$ hrs.
- Jingke Shi:  $9 + 8.0 = 17$  hrs.
- Zhengyan Hu:  $9 + 7.25 + 5 = 21.25$  hrs.

# Suggested point redistribution

Yangzekun Gao:

- > Initial DEMO of User Interface using Maven
- > Diagram of selecting which month, year you want to view
- > Diagram of editing from view page
- > Test coverage plan
- > revised iteration 1

Zhengyan Hu

- > Diagram of delete records
- > Diagram of add record from add page
- > GRASP
- > suggested point redistribution
- > timecards report with hours per member
- > revised iteration 1

Maiqi Hou

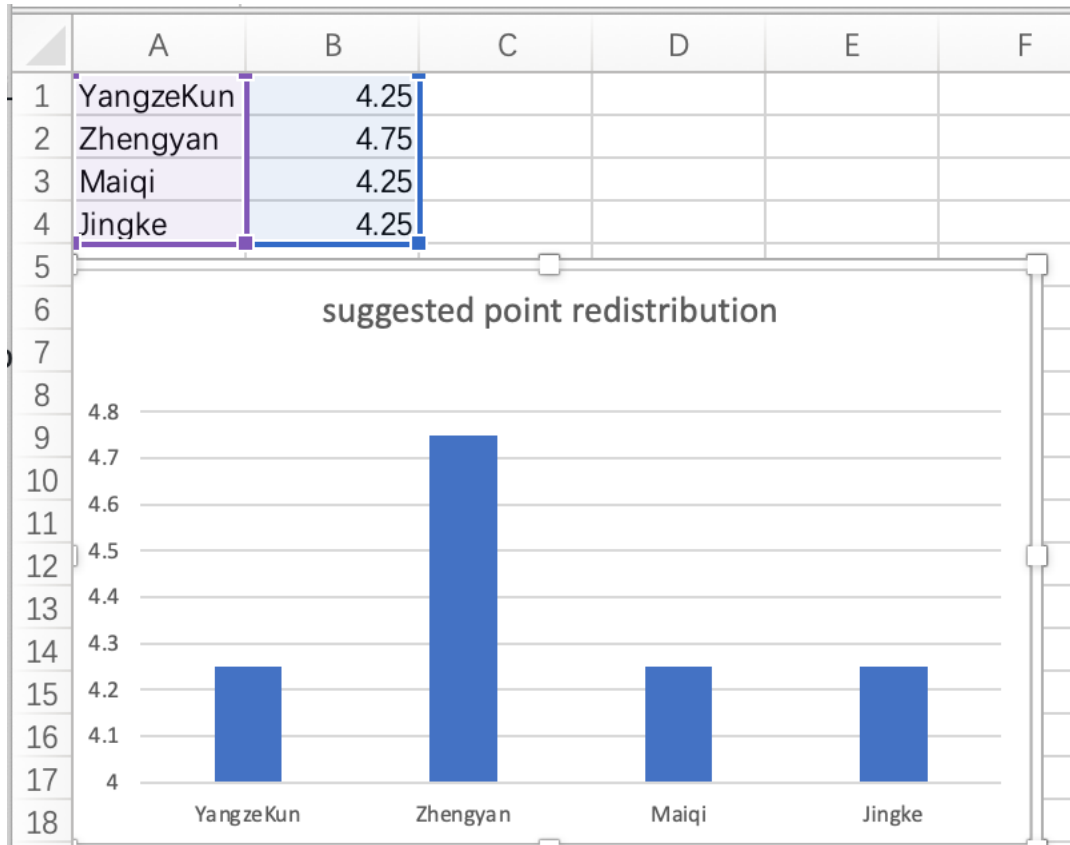
- > Diagram of main page selection
- > Diagram of view the table by given filter
- > Linked issue tracking system and git
- > the issue tracking records
- > revised iteration 1

Jingke Shi

- > Diagram of view the table from the given range
- > Diagram of export table from given range
- > GRASP

-> Updated project plan(Gantt)

-> revised iteration 1



# Issue Tracking

Issue	Found	Fixing	Done	Method
For the definition of classes, attribute, operation are not uniform				Meeting (Uniformed after discussion)
The operation process and design are not uniform (The button position is inconsistent, the frame size is inconsistent,and different ideas of function process and orders)				Meeting (Uniformed after discussion)
How to display the generate calendar				
How to save,generate and read the database				