

### **Proposal to Sir:**

**A program that has a welcome screen and allows users to plan a trip. Upon entry a user is given the option to either register or sign-in. When a user has signed in, they have the option of selecting how many trips they want to take. If the user has selected trips already previously from using the code, the amount of trips selected will be displayed on the screen. The user will also be given the option to edit the information for each trip. The cost for a trip depends on the bus type selected. Sorting will be done based on the date closest to the current date. Users will also be given the option to sort by name of trip.**

### **Main idea: Project 2 Innovation**

- Plan a trip? (welcome screen) ->
- Username enter (sign up or login) ->
  - Sign up -> enter new username and pass -> verify and say "Account successfully created" -> try to sign
  - Login -> enter old username and pass -> verify and say "Successfully logged in"
- Choosing to create or edit a plan ->
  - Table displaying trips for days 1-7
  - Create trip -> which day (limited to 1 trip a day) -> enter name of trip, no. of people coming and budget, -> adding a bus -> enter bus type(small, medium, luxurious), no. of buses, no. of people boarding that bus
  - Edit trip -> enter day -> data you wanna change about trip
- Bus restrictions:
  - 3-5 Buses for a single day
  - Buses have a cost, once the budget is spent, can't add anymore buses
  - No. of people - once all people are scheduled for a bus, can't add anymore buses
  - There is a set number of available buses, once all are scheduled for a trip message display telling user that bus type isn't available or no buses are available
  - Buses can only hold a certain no. of people. Once the bus is full, cannot be added

Notes for later:

## Screens (Preliminary Designs)

### Welcome screen

- Welcoming message (top)
- Login info: text boxes for username and password (bottom middle) (acc info in text file)
- Buttons: sign up, login (below text boxes)

\*If trying to login & account doesn't exist (i'm thinking empty JLabel below, displays error message when this happens, "Account successfully created" or "Welcome back" if it works)

Where my head's at for this (signing in causes a bigger window with the next screen to pop up and closes this one):

A screenshot of a Java Swing window titled "Welcome to YOUR TRIP PLANNER". The window has a light blue header area with the title. Below the header is a grey area containing a red text label "error/welcome message goes here". Underneath this are two text input fields labeled "Username" and "Password". At the bottom of the grey area are three buttons: "Login", "Sign Up", and "Close".

Dimensions: 790 x 490

I'm also thinking the banner part could be an image file we design and load in so it can look better.

### Trip Display screen (design very preliminary I had in mind)

- ❖ List of trips separated as days in tabs (yes tabs are a thing java has; JtabbedPane)
- ❖ I'm thinking final column in table with tickable checkbox for whether or not trip has been done
- ❖ Could probably include a bus id (i also forgot to put the bus price)
- ❖ Sorting by: trip id (automatically generated), name, people, or time (we can maybe store the hours n mins in different variables (integers) and have primary sort as hours and secondary sort as minutes) (24 hr time for simplicity)

A screenshot of a Java Swing window titled "User admin34's Plan". The window has a blue header area. Below the header is a tabbed interface with tabs for "DAY 1", "DAY 2", "DAY 3", "DAY 4", "DAY 5", "DAY 6", "DAY 7", and "SETTINGS". The "DAY 1" tab is selected, showing a table of trips. The table has columns: Name, Bus Type, # People, Trip ID #, and Time. Below the table is a blue area with a red text label "error messages go here". At the bottom of the blue area are four buttons: "Sort By", "New Trip", "Edit Trip", and "Exit". The "Sort By" button has a dropdown arrow. At the very bottom of the window is a yellow status bar with text: "Budget: \$50000", "Buses Scheduled: 35", and "Total Persons: 108".

Name	Bus Type	# People	Trip ID #	Time
For Students	Medium	23	103	13 : 30
Ochi Tourists	Luxurious	15	101	08 : 00
Quick Trip	Small	8	106	17: 45

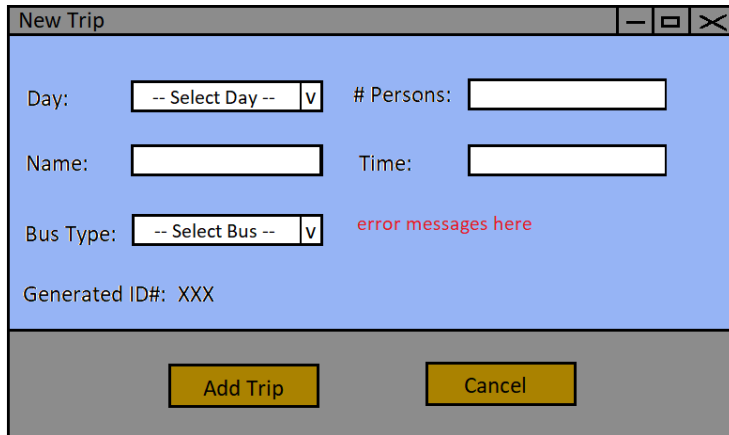
- ❖ Dimensions: 820 x 550
- ❖ General info at bottom
- ❖ Info would be blank if logged in for the first time
- ❖ Settings tab allows user to see/edit data like:
  - the budget they had set, (allows editing)
  - how much money is left,
  - Ability to change theme as a drop down menu
  - Total buses in the system (can be edited as well)
  - How many buses are remaining/available to book
  - Total no. persons booked already and remaining
  - Ability to change account password and username
- ❖ If we're feeling really fancy, background could be an image

### **Trip Edit/Add Screens (see below for visual representations)**

- ❖ If add: window pops up with all empty fields (textboxes) of a trip for them to input: day (drop down like: DAY1, DAY2, etc), name, bus type (drop down with types, price displayed), no. of persons, departure time;
  - buttons: add trip, cancel
  - If they enter valid info and press enter, a tiny window pops up for confirmation like "[Trip name & id at top] Your budget will be reduced to \$3000. Confirm?"
  - If yes then pop up closes, goes back to trip display
- ❖ If edit: window pops up with textbox to enter the day of the trip they want to edit:
  - Thinking drop down below that with all trip names, id beside them; listing from inputted day and they can select
    - Buttons to click: delete, edit, cancel
  - Deleting a trip has a tiny confirmation window "are you sure you want to delete: [trip name]?";
    - buttons: yes, cancel
  - Editing trip: (same appearance has 'add' window) window pops up with all fields (textboxes) prefilled with previous data of a trip: day(drop down), name, bus type (drop down with types, price displayed), no. of persons, departure time, trip id (just generated & displayed, can't edit); the desired fields can be changed;
    - buttons: save, cancel
  - Save will add info to trip display and close, returning to that screen

**The prelim window ideas I had in mind (open to change of course, colors especially):**

- Add Trip Screen (Click “new trip” button from trip display to get here)



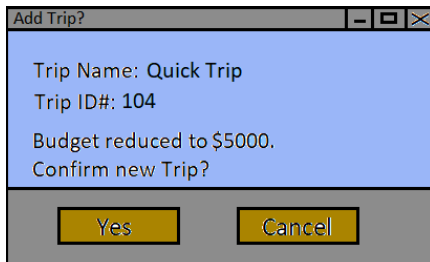
A window titled "New Trip" with a blue background and a grey border. It contains the following fields and controls:

- Day: A dropdown menu with "-- Select Day --" and a small 'v' icon.
- # Persons: A text input field.
- Name: A text input field.
- Time: A text input field.
- Bus Type: A dropdown menu with "-- Select Bus --" and a small 'v' icon.
- error messages here: A red text label.
- Generated ID#: XXX
- At the bottom, there are two buttons: "Add Trip" and "Cancel".

If that Time has already been for that day, error

Dimensions: 780 x 460

- Confirm pop up (Click “add trip” button from above to get here)

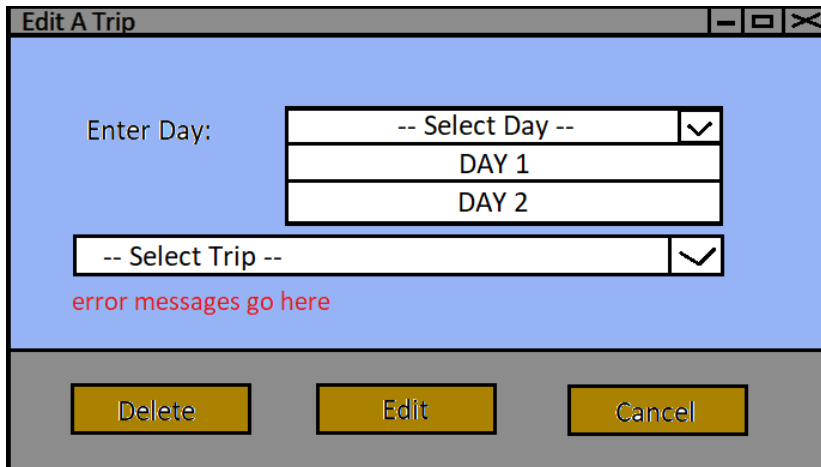


A window titled "Add Trip?" with a blue background and a grey border. It contains the following text and controls:

- Trip Name: Quick Trip
- Trip ID#: 104
- Budget reduced to \$5000.
- Confirm new Trip?
- At the bottom, there are two buttons: "Yes" and "Cancel".

Dimensions: 420 x 210

- Edit Trip Navigation (Click “edit trip” button from trip display to get here)



Edit A Trip

Enter Day:
 

-- Select Day --	▼
DAY 1	
DAY 2	

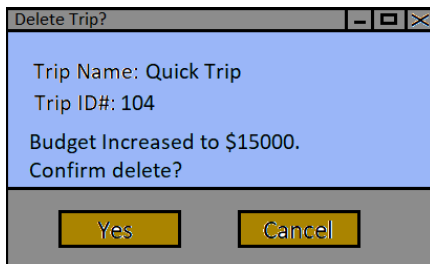
-- Select Trip --	▼
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error messages go here

Delete Edit Cancel

Dimensions: 690 x 390

- Delete pop up (Click delete" button from above to get here)



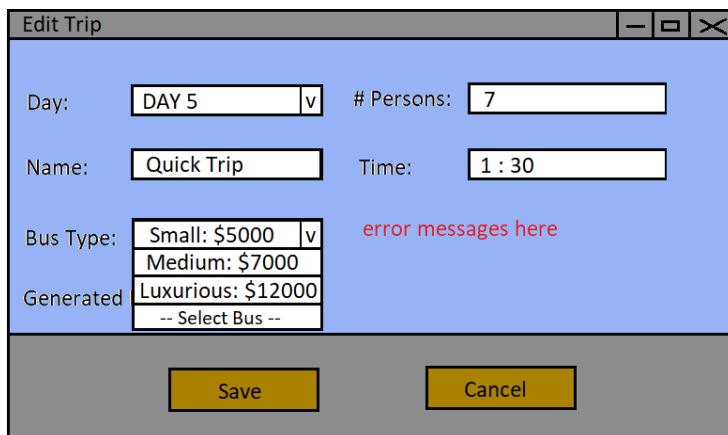
Delete Trip?

Trip Name: Quick Trip  
 Trip ID#: 104  
 Budget Increased to \$15000.  
 Confirm delete?

Yes Cancel

Dimensions: 420 x 210

- Edit Trip Screen (Click "edit" button from above to get here)



Edit Trip

Day: DAY 5 # Persons: 7

Name: Quick Trip Time: 1 : 30

Bus Type: Small: \$5000 Medium: \$7000 Luxurious: \$12000

Generated -- Select Bus --

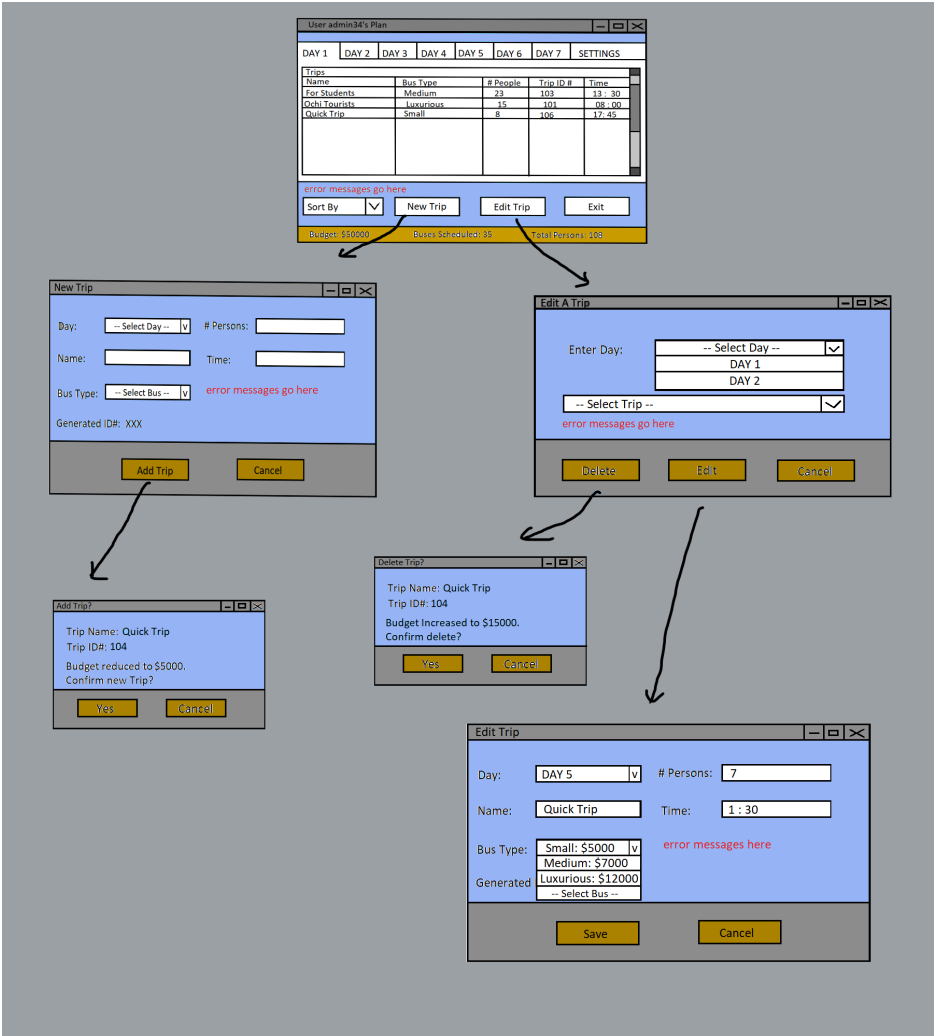
error messages here

Save Cancel

If that Time has already been for that day, error

Dimensions: 780 x 460

General Navigation Guide:



## **Features/Settings**

- Customization: options to change app theme

## **Functionality**

### **Classes**

#### **Account**

- String Username
- String Password
- Double Budget
- Account/App Settings (maintaining chosen theme for example)
- Trip objects

#### **Trip**

- String Name
- Int Auto Generated ID (format: T100)
- Time (array to store hours, and mins as int)
- int No. of People
- Boolean Completed
- Bus obj

#### **Bus**

- Enum Type: Small, Medium, Large
- Int Auto Generated ID (format: B10)
- Int maxCapacity

## Progress

(What has been done & needs to be done)

### General To-Do

- We need to make sure that the account signed in has their data being displayed throughout the program
- I think we can leave the file thing (for things to save even on close) until last
  - ◆ file for accounts (maybe accounts.txt) which has username and password
  - ◆ file for data connected to acc (like: accountusername.txt)

### Objects

(Make sure all the files are downloaded to get it to work. Also check above the Progress section for more details)

#### **Account.java**

- File is created

#### To-Do

- **(done)** Some getters and setters are missing
- No calculation for getting remaining budget
- **(done)** Maybe more methods need to be created

#### **Trip.java**

- File is created

#### To-Do

- **(done)** Some getters and setters are missing
- **(done)** Some attributes need to be added

#### **Bus.java**

- File is created

#### To-Do

- **(done)** Some getters and setters are missing
- **(done)** Some attributes need to be added



## **Screens**

**(Make sure all the files & folders are downloaded to get it to work)**

### **WelcomeScreen.java**

- Window is created and pops up
- Login button: launches the trip display screen
- Login works (I made 2 accounts there that can be logged into)
- Signup button: temporarily lets you into the system using admin account for testing
- Exit button works
- Changes appearance to fit account's theme
- **(done)** Signup button: There is no way to create an account
- **(done)** There is no file to read an account's data from (can be done later)
- **(done)** \*Signup button: There is no way to create an account
- **(done)** Login button: Should check if account exists

### **TripDisplayScreen.java**

- Window is created and pops up
- The tabs are visible for each day with table that has sample data
- The settings tab lets you change the theme for all windows in program
- New trip button: launches the add trip screen
- Edit trip button: launches the trip navigation screen
- Back to login button: takes you back to the welcome screen
- The trip data (table) displayed for each day is not connected to the account
- Sort By button: this doesn't work
- The buttons in the settings tab for saving changes like editing the username, budget and passwords don't work

### **To-Do**

- No method to find a trip in trips for a given day
- No method to add a trip to trips for a given day
- No method to edit a trip in trips for a given day

### **AddTripScreen.java**

- Window is created and pops up
- Day has a drop down menu with all options to choose from
- Bus type has a drop down menu with all options to choose from
- Add button: asks for confirmation
- Cancel button works
- Changes appearance to fit account's theme
- Add button:
  - ◆ after asking for confirmation, clicking yes doesn't actually add trip to the account
- Error message displays whether input is valid or not
- The data entered is not saved to the account as a new trip
- Bus ID and Trip ID are not generating/showing unique IDs with each new trip

#### To-Do

- Some Validation for Time and NumPersons is loose

### **EditTripNavigation.java**

- Window is created and pops up
- Day has a drop down menu with all options to choose from
- Trips have a drop down menu with all options to choose from for that day
- Delete button: asks for confirmation
- Edit button: launches the edit trip screen
- Cancel button works
- Changes appearance to fit account's theme

#### To-Do

- **(done)** Error message displays whether input is valid or not
- **(done)** The day being selected doesn't change the trips drop down menu to only display trips for the selected day

### **EditTripScreen.java**

- Window is created and pops up
- Looks very similar to AddTripScreen
- Allows user to click a checkbox confirming if trip was completed

- Save Edit button: asks for confirmation
- Cancel button works
- Changes appearance to fit account's theme

#### To-Do

- **(done)** Save Edit button:
  - ◆ after asking for confirmation, clicking yes doesn't actually edit the trip's data in the account
- **(done)** Data displayed is not taken from current account based on info from EditTripNavigation
- **(done)** Error message displays whether input is valid or not