## **Hw2 Pseudo code**

<ul><li>Date Created</li></ul>	@October 2, 2022 10:55 PM
▲ Assign	
Status	
Priority	
□ Due Date	@10/02/2022
© URL	

## 1. Seat Definition

a.

```
Seat_Number //
Seat_Name // init the seat name as N/A, if the name has changed, then it was taken
```

## 2. Display the seating Map

a. Function **Show\_main\_menu()** // Return to the main menu when there is no valid input.

```
Show_main_menu()
{
   1.Clear the screen
   2.Print all Menu the content
}

printMenu()
{
   option_for_menu()
{
    printMenu();
```

```
input ->
Switch {
    case1:
        task1;
        exit_current_menu()
    case2:
}
```

3. Print a Passenger manifest

```
print_passager_manifest()
{
    Seatnumber_assending
    Seatnumber_dessending
    Alphabetical_assending
    Alphabetical_dssending
}
print_seatMap()
{
}
```

- 4. Load Previous "Seat Assignment and Passenger Manifest"
  - a. to save (and later load) the current seat assignments and passenger manifest from file(s)

```
Load_passage_manifest()
{
}
```

- 5. Save current "Seat Assignment and Passenger Manifest"
  - a. to save (and later load) the current seat assignments and passenger manifest from file(s)

```
Save_passage_manifest()
{
```

```
}
```

b. AutoSave

```
auto_save__manifest()
{
}
```

- 6. Choose a Seat
  - a. Function Initial\_seat\_selection();
    - i. Type: Fist class, Business Class, Economy Class.
      - 1. Define FirstClass, businessClass, Economy Class

2.

ii. Generate random seat numbers for seat allocation.

```
RandomNumGenerator()
{
  int = num_generator()
  if(int not seen before)
}
```

iii. Check whether the current seat has been allocated.

```
Check_Whether_this_seat_is_available()
```

- iv. Check with user which class to go? if not available First Class  $\rightarrow$  Business Class  $\rightarrow$  Economy  $\rightarrow$  next flight in 3 hours.
  - 1. Which Class the user choose?

```
Which_class_the_user_input()
{
  FirstClass()
  BusinessClass()
```

```
Economy()
}
```

## b. Function Final seat Assignment()

Upgrading to higher class.

1. Class full, no inquiry

a.

```
bool Check_the_higherClass_is_FULL()
{
}
```

2. if Avaiable, start to choose for Final class.

```
Bool check_theLowerClass-is_full()
{
}
```

3.

Downgrade to Lower class.

- 1. Class full, no inquiry
- 2. if Avaiable, start to choose for Final class.
- c. Initial Selection became the final selection
- d. if the upgrade/downgrade option is available. the user should be notified about for both higher or lower class.
- e. AutoSave

```
Trigger_autoSave_every_1_secs();
{
  vector.save()
}
```

- 7. Cancel seat assignment
  - a. Cancel the seat(with a seat number and name match)

```
Cancle_the_Seat(str name, int seat_num)
{
   Delete the seat from the reserved(vector)
}
```

- b. AutoSave- Trigger the auto\_save() every 1 s
- 8. Print a boarding pass for a chosen passenger or seat number
  - a. AutoSave- Trigger the auto\_save() every 1 s
- 9. Quit the program

```
// Reture to the main menu when the user doen not gave valid input.
Function Show_main_menu()
End
```