

# OOP Project



## Manage an Airline

# **OOP FINAL PROJECT**

Here's a video about  
how an airline works...

[CLICK HERE](#)

# OOP FINAL PROJECT

## Your assignment: model an entire airline!

- What are all the entities described in the video?
- How do they relate to each other?
  - e.g: a booking has trips, which has flights, which has passengers and a crew and a destination airport and a gate number and checked-in baggage and meals...
  - but these entities all have different relationships to each other!
- What other entities are there?

# OOP FINAL PROJECT

## Full Requirements are in the “Airline Management System Stories” pdf document

1. Make a list of the entities described in the story.
2. Construct the UML to describe all the entities in the above story.
3. Create the OOP classes to handle the entities and their relations.
4. Within your classes, write functions that will help with the 8 user stories in the pdf document.



Airline  
Management  
System  
Stories.pdf

# OOP FINAL PROJECT

## Example User Story

“As a flight manager at Singapore Airlines, I want to make sure that the next flight has a complete crew scheduled.”

```
getCrew(flightNumber : string, date : Date) : Employee[]  
{  
    // write some code to return a list of Employees  
    here!  
}
```

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## Example User Story

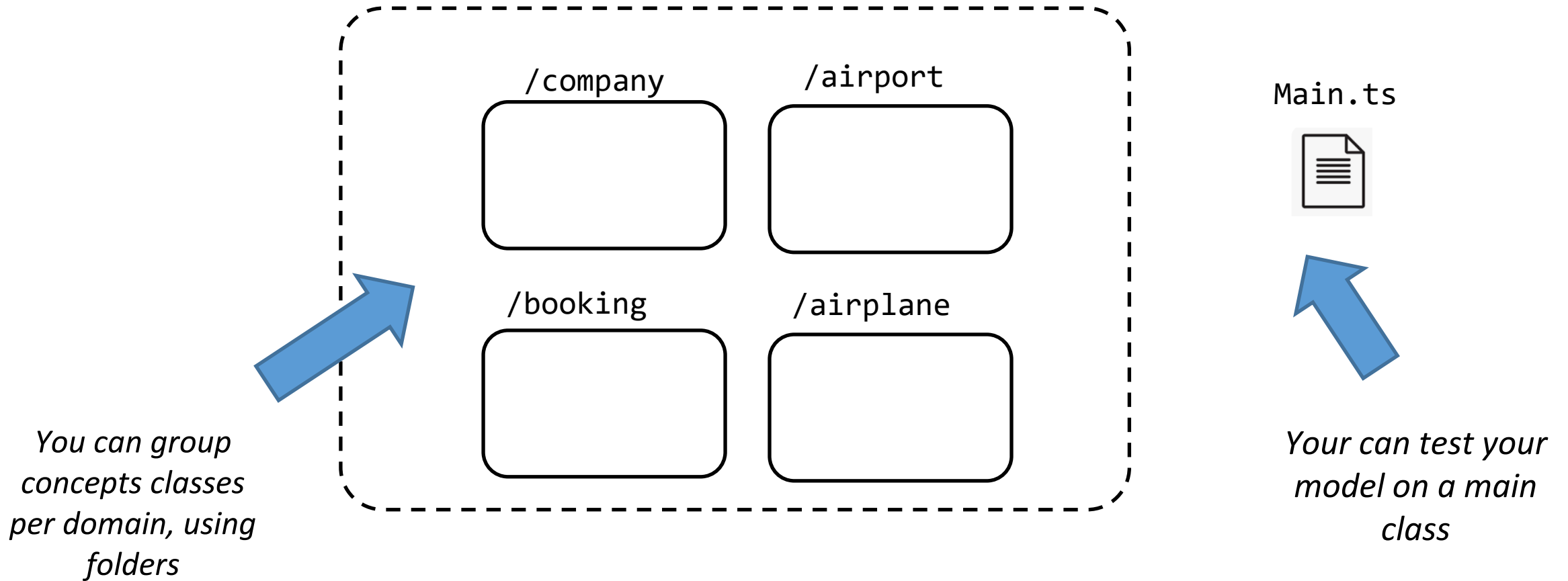
“As a flight manager at Singapore Airlines, I want to make sure that the next flight has a complete crew scheduled.”

- **or maybe something like this:**

```
getCrew(flight : Flight) : Crew[] {  
    // write some code to return a list of Crew here!  
}
```

# BACK-END ONLY APP!!!

No front end needed - no forms, no form validation, no user account authentication etc.



# WHAT DO YOU **NEED TO RETURN** ?

DEADLINE  
**SAT 29th**



Your UML diagrams as a **PDF** file

**Many diagrams** are expected!



Your project as a **ZIP** file

Must **include** the TEST!



# OOP **FINAL** **PROJECT**

- ✓ 2 students per team
- ✓ 7 sessions + WEEKEND
- ✓ Deadline to submit : SATURDAY 29<sup>th</sup>
- ✓ JURY the following week

# OOP PROJECT EVALUATION



UML  
DIAGRAM

40%



TS  
CODE

30%



**5 MIN**

PRESENTATION

30%



UML

|   |    |
|---|----|
| Able to design <b>relevant</b> classes and enums  | 50 |
| Able to design class properties and relationships | 50 |



TS

|  |    |
|--|----|
| Able to code the UML into typescript classes   | 30 |
| Able to manage the <b>logic of the system</b> :<br><i>Example : create a method to find the meals for a flight</i> | 70 |



5 MIN

PRESENTATION

|   |    |
|---|----|
| Able to <b>describe your solution and what your system can do</b> | 40 |
| Able to <b>explain the reasons</b> of the chosen approaches       | 40 |
| Clear English + communication                                     | 20 |