

# EIST – T02 Team Project

## Flight System GAFIS

### Scrumbags

Technische Universität München

29 July 2022

# Outline

## Problem Statement

## High-Level Objectives

- Back-End

- Front-End

## Functional Requirements

- Flights

- Logged-in Functionality

- General Functionality

## System Design

- Analysis Object Model

- Top Level Design

- Communication Model

## Demonstration

## Current Status and Future Work

# Outline

## Problem Statement

### High-Level Objectives

- Back-End

- Front-End

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# Flight System

Design a system to make traveling via airplane more pleasant

- ▶ Get Information about the current flight
- ▶ Get points of interest at destination
- ▶ Create flight journeys
- ▶ Enjoy movies, food and drinks
- ▶ ...

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- Analysis Object Model

- Top Level Design

- Communication Model

## Demonstration

## Current Status and Future Work

# Outline

## Problem Statement

## High-Level Objectives

- Back-End

- Front-End

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# Weather, Movies, Flights, Maps, POIs

Fetch and present data from external services

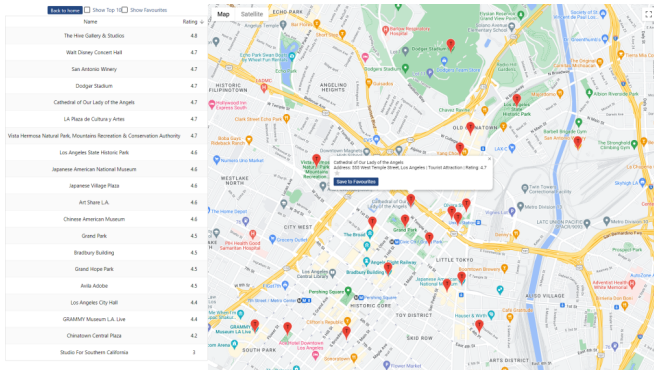


Figure: Points of interest at destination

# Flight information and Survey

Create a login system

- ▶ Extend system functionality if logged in
- ▶ Grant persistence of information

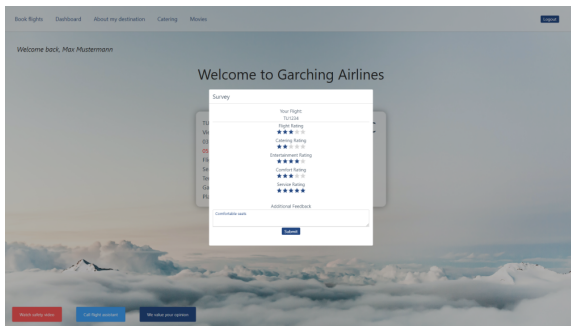


Figure: Logged-in users can take a survey



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Intuitive to use and easy to understand

- ▶ Complete all interactions in  $< 3$  clicks

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- Analysis Object Model

- Top Level Design

- Communication Model

## Demonstration

## Current Status and Future Work

# Outline

## Problem Statement

## High-Level Objectives

- Back-End

- Front-End

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# Flights

- ▶ Show flight information
- ▶ Build flight trips from hand-picked flights
- ▶ Display destination information

The screenshot displays a flight booking application. On the left, a 'Book flights' form is visible with fields for 'From' (Berlin (BER)), 'To' (Ontario (ONT)), and 'Date' (28 - 47, 2022). Below the form, a list of flights is shown, each with a radio button to select it and a green 'Add to journey' button. The flights are:

- CA7777 | Claudian Air: Berlin (selected) or Ontario
- OC1849 | OCamIFly: Berlin (selected) or Ontario
- OF7662 | OnlyFlights: Berlin (selected) or Ontario
- TU1105 | TUMAir: Berlin (selected) or Ontario
- XA6741 | Excellence Airways: Berlin (selected) or Ontario

On the right, a map shows the flight paths connecting various cities. Below the map, a table lists the flights with their numbers, start and end cities, and departure dates.

Number	Start	End	Departure
AC3755	Berlin	New York	22/07/2022
HA2309	New York	Los Angeles	22/07/2022
FW5236	Los Angeles	Bogota	22/07/2022
OF3301	Bogota	Conakry	22/07/2022
CA7181	Conakry	Marskech	27/07/2022
CA1209	Marskech	Athens	30/07/2022
699325	Athens	Berlin	30/07/2022

Figure: Build flight journeys

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Back-End

Front-End

## Functional Requirements

Flights

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General Functionality

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Analysis Object Model

Top Level Design

Communication Model

## Demonstration

## Current Status and Future Work

# Feedback

- Take survey on flight comfort, catering, ...

The screenshot shows a user interface for 'Garching Airlines'. At the top, there is a navigation bar with links: 'Book flights', 'Dashboard', 'About my destination', 'Catering', 'Movies', and a 'Logout' button. Below the navigation bar, a message says 'Welcome back, Max Mustermann'. The main heading is 'Welcome to Garching Airlines'. A 'Survey' modal is open in the center, containing the following sections:

- Your flight:** TU1234
- Flight Rating:** ★★★★★ (5/5)
- Catering Rating:** ★★★★★ (5/5)
- Entertainment Rating:** ★★★★★ (5/5)
- Crew Rating:** ★★★★★ (5/5)
- Service Rating:** ★★★★★ (5/5)
- Additional Feedback:** A text input field containing 'comfortable seats'.

At the bottom of the modal is a 'Submit' button. The background of the dashboard features a scenic image of a mountain peak above a layer of clouds. At the very bottom, there are three buttons: 'Watch safety video', 'Call flight assistant', and 'We value your opinion'.

Figure: Logged-in users can take a survey

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Front-End

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# Infotainment

- ▶ Watch movies and order food and drinks
- ▶ Request assistance
- ▶ Watch flight safety instructions

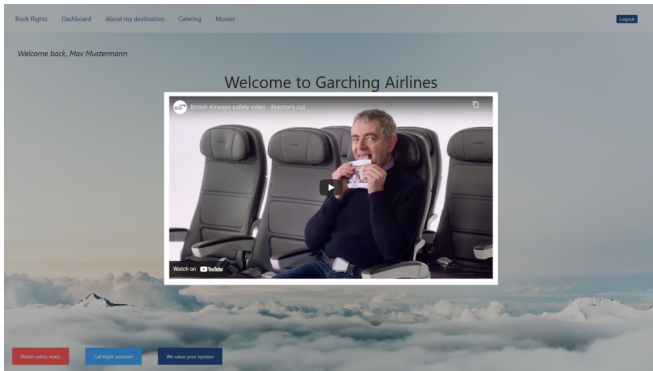


Figure: Safety video

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- Analysis Object Model

- Top Level Design

- Communication Model

## Demonstration

## Current Status and Future Work

# Outline

## Problem Statement

## High-Level Objectives

- Back-End

- Front-End

## Functional Requirements

- Flights

- Logged-in Functionality

- General Functionality

## System Design

- Analysis Object Model

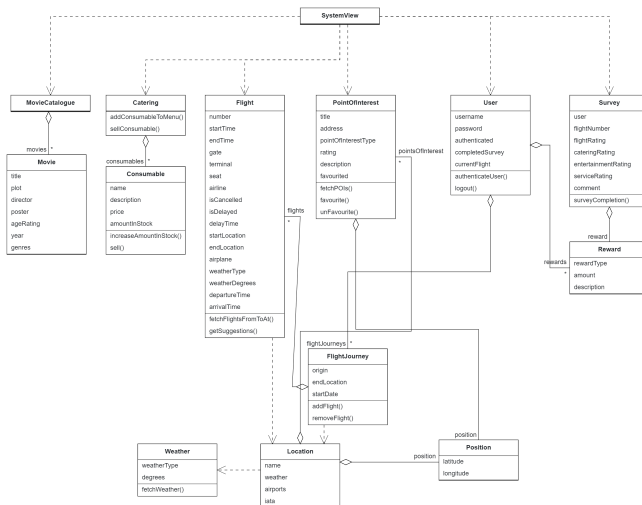
- Top Level Design

- Communication Model

## Demonstration

## Current Status and Future Work

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# Outline

## Problem Statement

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- Front-End

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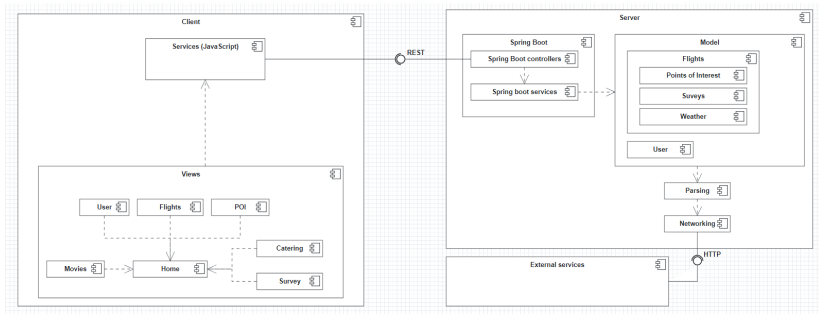
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- Communication Model

## Demonstration

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# Subsystem Decomposition



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## Problem Statement

## High-Level Objectives

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- Front-End

## Functional Requirements

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- Analysis Object Model

- Top Level Design

- Communication Model

## Demonstration

## Current Status and Future Work

# Communication Model

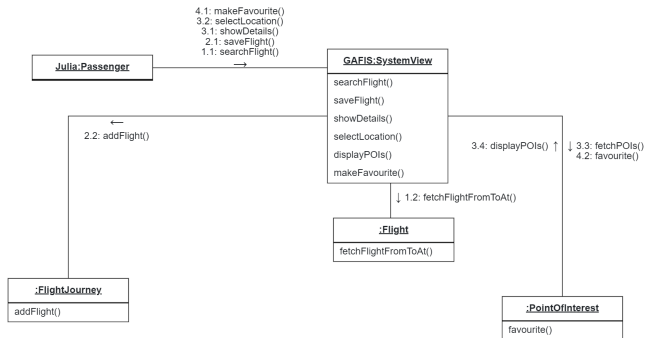


Figure: Julia's flight from Munich to Lisbon



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- Analysis Object Model

- Top Level Design

- Communication Model

## Demonstration

## Current Status and Future Work

# Outline

## Problem Statement

## High-Level Objectives

- Back-End

- Front-End

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- ▶ Audio player / music application
- ▶ News portal
- ▶ Database for persistent users and locations
- ▶ Live weather
- ▶ Real time plane location tracker
- ▶ Prepaid wallet for payment of catering orders and flight booking