

# Project Description (Airline Pilots)

Balancing an employee's workload is always challenging and a sensitive topic in the workplace. With the ever desire to improve work-life balance and make the workplace environment more conducive and attractive (Guest. 2002), companies are often looking for tools that can ease their workload management as work-life balance is a cycle (Lupu & Ruiz-Castro, 2021).

As a result, your client (your instructors) has decided that a workload management system on the Web would be an informative way to have an overview of the company's manpower strengthen at any time and get more informative availabilities of employees and engagement.

The system is expected to provide an interactive and visual way for the employee to see their job assignments, working hours engaged/assigned, and for employees to inform the system of their availabilities. Employees should be able to indicate to the company any assigned jobs they cannot fulfil ahead of time. To assist with the workload planning, employees should be able to indicate their availabilities up to one month earlier.

The administrative staff (usually the manager) should be able to visualise the manpower availability at any time up to one month earlier. Hence, the system is expected to provide an interactive and visual way for the administrative staff to visualise manpower availabilities, job assignments, and allocate jobs. Individual employee workload and availabilities should be able to be visualised at a glance.

## The Client

Your lab instructors for this module are your collective clients who will meet regularly to discuss the requirements and ensure all teams are on the right track. Note that you will be able to ask the client questions ONLY during your client sessions. So please use them wisely.

## The Company

In the airline pilot's division, work allocation is assigned weekly every Monday. The workload allocation planning will start every Thursday of the week. Hence, all employee's availabilities must be informed in the system every Wednesday to be considered in the planning. If employees miss the weekly deadline, requests would be dealt with on a case-by-case basis.

The weekly roster is dependent on the plane assigned to a route. Currently, the airline fleet consists of ten Boeing 737-8, six Boeing 787-10, and ten Airbus A350-900. On all Boeing 737-8 serving routes, one Captain or higher and one Senior First officer or lower must be assigned. On all Boeing 787-10 and Airbus A350-900 serving routes, one Captain or higher, one Senior First officer, and one First officer or lower must be assigned. This project will use the pilot ranks from the following URL: <https://www.flightdeckfriend.com/ask-a-pilot/pilot-uniform-guide-number-of-stripes>

The manager will make their assignments such that staff should not need to travel between routes and planes do not stay on the ground for more than three hours. To fly a particular make and model of an aircraft, all pilots must go through at least two months of training for the make and model before they can be qualified to fly it. Managers must take this information into consideration when scheduling their assignments.

## Initial Requirements

We have sat down and brainstormed what we want to see in the Web application. As with any annoying client, we may be unclear, unreasonable and contradictory, amongst other common traits you may know of clients. Nevertheless, the following is our best attempt at listing what we want currently:

1. The app should be Web-based in a language of your choosing
2. The manager should be able to visualise the staff workload immediately on the landing page
3. The manager should be able to allocate jobs to staff for one week at a time
4. The manager should be able to view up to three staff availability and any relevant information to make the job assignment easier on the job allocation page
5. When displaying the staff availability, the workload assigned, staff's job preference, staff's location at a particular date, and availabilities for the week should be shown
6. On the manager's landing page, the top three staff with the lowest workload should be shown, and highlight all staff over 40 hours of jobs allocated
7. Staff should be able to view their weekly job assignments and overall workload for the month on their landing page
8. Staff can add and edit their availabilities up to 5 weeks ahead of time.
9. Staff can indicate their job preference for the week
10. Staff can reject jobs assigned to them, but they will be warned to discuss the jobs with their manager before proceeding with the rejection
11. The company's IT administrators will oversee adding new staff and managers to the system

## Timeline

The timeline for this project has been outlined in the module profile (M1- M3), these are strict submission deadlines, and no extensions will be permitted due to our tight turnaround time for this project. To help you manage your project milestones and timeline, consider using a collaboration tool like Trello to assist you to organising your project.

## Payment Terms

Due to company policy, we have to "sign-off" after each milestone in the timeline. Your remuneration will be in-kind in the form of academic grades, tiered and dependent on your performance in each of the milestones.

## References

Guest, D. E. (2002) 'Perspectives on the Study of Work-life Balance', *Social Science Information*, 41(2), pp. 255–279. doi: 10.1177/0539018402041002005.  
<https://doi.org/10.1177/0539018402041002005>

Lupu, I. and Ruiz-Castro, M. (2021) "Work-Life Balance Is a Cycle, Not an Achievement". Last accessed 22 July 2022. <https://hbr.org/2021/01/work-life-balance-is-a-cycle-not-an-achievement>