**Project Description**

**Fly High – Airline Management System**

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# Background description

The use of flights, both in terms of travelling and airfreight, has greatly increased over the past decades, air travel becoming one of the most important modes of transport nowadays. Dating back to 1903 with the first flight of two American engineers brothers, the air transport is and has demonstrated itself to be a thriving market which doubles its volume of passengers every 15 years. Worldwide, in 2016, there have been over 3.7 billion passengers carried by air. The 60 % growth of the market over the last ten years shows the efficiency of air travel, including time, convenience and costs. (AIRBUS S.A.S., 2017)

The outstanding numbers clearly recommend this sector as an essential service for people today, not only in means of its obvious utility, but also being known for contributing in Europe to the employment of 12.3 million people (*Fast Facts | ACI EUROPE*, no date), needed to keep the system working properly. For instance, the operation of landing or taking off requires precise work procedures of a group of qualified personnel, both in the airport and the plane, as well as complex systems and networks running in the background.

Although air travel can be named a relatively new option of transport, this market has already achieved a lot, promising even much more than that. Studies show that until 2036, the traffic flow in Europe will expand 2.6 times than in present. (AIRBUS S.A.S., 2017) The reasons of its enhanced popularity are mainly supported by the title of the fastest form of transport and a good safety record for commercial air transport, as data from the European Aviation Safety Agency shows. (*Air safety statistics in the EU - Statistics Explained*, no date) Analyzing Denmark’s situation, statistics retrieve a total of 342,000 flights in 2014, a number of 23 airports and 1047 planes in 2015.(--ref4)

One specific Danish airline, Fly High, founded by Tobias Jensen and William Christensen in 2009 is a company headquartered in Vejle, which initially operated domestic flights. Now, the airline wants to expand its flights across Europe, thing that brought the request to the team for a new management system. While operating internal flights, the company’s data was being stored in files. Once the amount of data started to increase in size, the operations became more complicated to be handled. Another reason which led to the wish of a change in the management system is the fact that until now, the only way for booking a ticket for a specific flight was calling the company and receiving it afterwards via email. Additionally, the company is not very popular outside Denmark, meaning that generally people do not have easy access to its services.

# Definition of purpose

The project group decided to undertake this project in order to expedite the company and make sure that all the systems are efficient and assured as well as enhance its popularity. //Michal

The project group decided to create a management system in order to help the airline company manage their data efficiently and provide the clients with a convenient way of booking tickets. //Cristina

# Problem Statement

The project focuses on the way the company can efficiently store and manage internal data, as well as meeting clients’ wish of booking tickets and retrieving information regarding flights. Questions to be answered:

* How can we ensure that the new system will be always up to date tool?
* What should we do to avoid losing data?
* How can we make the system scalable?
* What are we going to do with cancelled flights?

# Delimitation

# Choice of models and methods

Every company needs to follow technological progress, otherwise they will not be able to evolve. *Fly High* is a great example of old, good prospering company with obsolete managing system. If they want to stay on the market they need to change it.

The essential issue of Fly High company is that they are lacking client/server system which would be quick and easy-accessible way to present and sell the product. It is very important factor for every business as it increases the number of clients and the demand for offered services.

The objective is to provide Fly High preset-day tool to help the company administer their data and manage their relationship with clients. The expected outcome is to build the “bridge” between the company and their customers which would allow both sides save their time, money and concerns.

The project will be conducted by a team consist of 4 people. The team will use Scrum framework for managing work in timeboxed iterations which is modern and efficient way, used by software developers. It defines a flexible, holistic product development strategy where the team works as a unit to reach a common goal. In this case there is no leader in the team, every member is equally responsible for the workload and the workflow and has to spend approximately 280 hours in order to develop the system. The team must understand the problem and comprehend the field of work of the client first. Next, they will learn how to use tools they are going to need, and they will follow the pattern of Scrum framework developing the system within next 13 weeks.

# Time schedule

The project period has started within the start of second semester and the deadline is set to the 8th June. Between these dates there are 120 days and every member of the team is supposed to spend approximately about 280 hours working on the project.

In order to complete the project the unified process will be used. That means many parts of the project will be done at the same time but with different intensity.

At first the most focused part will be business modeling and requirements, where the main goals will be set so that every team member will know what exactly has to be done. Later, they will also appear analysis and design parts which main purpose is to plan a way how to achieve all the goals.

In the next step, when everything should be planned and everybody should know what is expected to be done, there will become bigger focus on implementation parts which comes together with testing.

In the end there will appear deployment part, which will allow to check if everything is done correct and if not, give a chance to improve it, as well as make the system able to use in a convenient way to the customer.

At every step of developing the project, all elements can appear but the expected focus will be as was said above.

# Risk assessment

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Risks** | **Description** | **Likelihood Scale** | **Severity Scale** | **Preventive & Responsive actions** | **Identifiers** | **Responsible** |
| **Risk 1** | **Not meeting the deadline** | **2** | **4** | **The team will track the previous projects and divide work among teammates** | **Delays, additional work, wrong estimation** | **Team leader, every team member** |
| **Risk 2** | **Unsettled project objectives** | **3** | **3** | **The team will set goals, responsibilities and terms of cooperation** | **Lack of agreement** | **Team leader, every team member** |
| **Risk 3** | **Teammate’s disease** | **2** | **2** | **The team members will take care of their condition** | **Absence during team meeting** | **Every team member** |
| **Risk 4** | **Lack of knowledge** | **3** | **2** | **The team members will study more, as well as helping each other** | **Not being able to finish the tasks** | **Every team member, teacher** |
| **Risk 6** | **Bad leadership/ no leader** | **3** | **1** | **The members will discuss team hierarchy and leadership** | **Issues with making decisions** | **Every team member, team leader** |
| **Risk 7** | **Lack of experience** | **4** | **1** | **The team does not have to be experienced to finish the project, but members can gain experience by exercising** | **The team does not know how to react when unpredictable situations arise** | **Every team member** |
| **Risk 8** | **Lack of communication** | **2** | **2** | **Every team member will be active and will be encouraging others to take part in meetings** | **The members do not know other member’s opinion** | **Every team member** |
| **Risk 9** | **Lack of commitment** | **3** | **2** | **Every team member has to be committed to the project to a high extent** | **The members do not perform expected tasks** | **Every team member** |

Scales: 1-5; 5 – high risk

# Sources of Information

AIRBUS S.A.S. (2017) *Growing Horizons*. Available at: http://www.airbus.com/content/dam/corporate-topics/publications/backgrounders/Airbus\_Global\_Market\_Forecast\_2017-2036\_Growing\_Horizons\_full\_book.pdf (Accessed: 6 March 2018).

*Fast Facts | ACI EUROPE* (no date). Available at: https://www.aci-europe.org/policy/fast-facts.html (Accessed: 6 March 2018).

*Air safety statistics in the EU - Statistics Explained* (no date). Available at: http://ec.europa.eu/eurostat/statistics-explained/index.php/Air\_safety\_statistics\_in\_the\_EU (Accessed: 6 March 2018).

--ref 4

One of those books from library

## Appendices

[**Appendix A: Group Contract**](Group%20Contract.docx)

[**Appendix B: Group Formation**](Group%20Formation.docx)