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| Fontys University of applied science |
| Project Plan |
| Parcel Handling Simulation |
|  |
| **GDS - Group 3** |
| **9/7/2010** |

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| Author |  | Qian Li |
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| Department |  | ICT |
| Client |  | Peter Boots |
| School tutor |  | Casper Schellekens |

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| --- | --- | --- |
| Group leader |  | Qian Li |
| Group members |  | Antoine Girard |
|  |  | John Ibeagha |
|  |  | Kritien Kolev |
|  |  | Sebastian Lepage |

**Approval Signatures**

|  |
| --- |
| Approved by: School tutor  Date: |
| Approved by: Client  Date: |

**Document Change Control**

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**Review and Approval**

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| **Review** | | | |
| **Version** | **Date** | **Reviewed by** | **Position/Role** |
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| 1.0 | 2010-09-06 | Peter Boots | Client |
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| 2.0 |  | Peter Boots | Client |

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|  |  | Casper Schellekens | School tutor |
|  |  | Peter Boots | Client |

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# Project Overview

This section provides an overview of the background and objectives of the project, the project risks and constraints, a list of project deliverables and a summary of the project schedule.

## Project Description

BACKGROUND

The parcel handling simulation is a distributed application that is intended to resemble the parcel handling simulation at the airports. It includes the simulation of the conveyors used to transport the parcels or baggage, the inputs, which are the check-in or parcel drop-off desks at the airport, the sorters that route the items to their destination and the outputs, which are the destination gates of the parcels.

OBJECTIVES

The application is fully implemented with all required functions and can work well.

The user will be able to build the conveyors by drawing lines on the working area. Each parcel will have a set of information within itself such as a destination, ID, a priority based on urgency of delivery, etc, which would allow the sorters to navigate the parcel to its destination.

Finally, additional features as parcel dimension diversity, storage facility, belt speed etc. can be added to the simulation.

## Processes Involved

* Project initiation and definition
* Project design and implementation
* Project finalization

## Project Constraints

CONSTRAINTS

* Schedule:

Time allocated for project: 14 weeks

* Resources:
* Computers/Laptops
* Software: Ms Visual Studio

Ms Office Word

Ms Office PowerPoint

* One school tutor and 5 students

## Project Deliverables

* Project plan
* User requirements specification
* Design document
* Test plan
* User manual
* Technical manual
* Final report
* Presentation

## Schedule Summary

PROJECT PHASES OVERVIEW

* Initiative Phase
* Definition Phase
* Design Phase
* Realization Phase, containing 3 iterations

# Project Organization

This section gives a clear overview of the teachers and students involved in this project.

## External Interfaces

* Client:

|  |  |
| --- | --- |
| Name | Casper Schellekens |
| Email | [c.schellekens@fontys.nl](mailto:c.schellekens@fontys.nl) |

* School tutor:

|  |  |
| --- | --- |
| Name | Peter Boots |
| Email | [p.boots@fontys.nl](mailto:p.boots@fontys.nl) |

## Internal Structure

* Group leader:

|  |  |
| --- | --- |
| Name | Qian Li |
| Email | [cynbia\_lee@hotmail.com](mailto:cynbia_lee@hotmail.com) |
| Telephone | +31 614 23 93 09 |

* Doc controller:

|  |  |
| --- | --- |
| Name | Antoine Girard |
| Email | [agirard@enib.fr](mailto:agirard@enib.fr) |
| Telephone | +31 624 80 89 70 |

* Group member:

|  |  |
| --- | --- |
| Name | John Ibeagha |
| Email | [ginibeagha@yahoo.com](mailto:ginibeagha@yahoo.com) |
| Telephone | +31 643 78 33 13 |

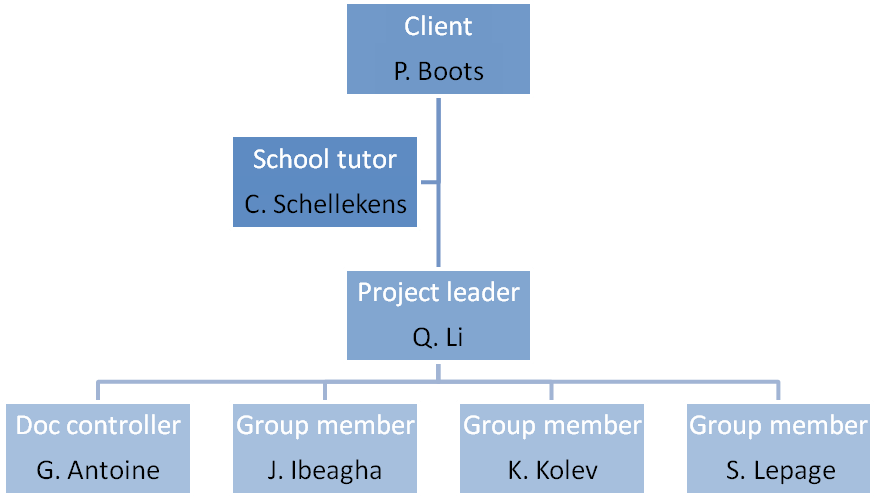
* Group member:

|  |  |
| --- | --- |
| Name | Kristian Kolev |
| Email | [Kristian.kolev@mail.bg](mailto:Kristian.kolev@mail.bg) |
| Telephone | +31 619 80 74 58 |

* Group member:

|  |  |
| --- | --- |
| Name | Sebastian Lepage |
| Email | [S8lepage@enib.fr](mailto:S8lepage@enib.fr) |
| Telephone | +33 67 59 17 08 |

## Organizational Chart



## 

## Roles and Responsibilities

The following list and table describe the roles and responsibilities assigned for this project.

|  |  |
| --- | --- |
| **Abbreviations:** | |
| Ap = Approve  Ar = Archieve  D = Discuss  G = Give | S = Send  Se = Set up  R = Receive |
| **Responsibility List:** | |
| 1. Project plan 2. User Requirements Specification (URS) 3. Process document 4. Design document 5. Test document | 1. User manual 2. Application 3. Minutes 4. Project evaluation 5. Project guidance |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Roles/Responsibility** | **A** | **B** | **C** | **D** | **E** | **F** | **G** | **H** | **I** | **J** |
| **Client** | R, Ap | R, Ap | R | R, Ap | R, Ap | R, Ap | R, Ap  Ar | R | G |  |
| **School tutor** | R, Ap | R, Ap | R | R, Ap | R, Ap | R, Ap | R, Ap  Ar | R | G | G |
| **Group leader** | Se | Se, D | R | Se, D | Se, D | Se, D | Se, D |  |  |  |
| **Doc controller** | R, Ar, S | R, Ar, S | R, Ar, S | R, Ar, S | R, Ar, S | R, Ar, S | R, Ar, S | R, Ar |  |  |
| **Group member** | D | Se, D | Se, S | Se, D | Se, D | Se, D | Se, D | R |  |  |
| **Chairman(Meeting)** |  |  |  |  |  |  |  | R, Ap |  |  |
| **Secretary(Meeting)** |  |  |  |  |  |  |  | Se, S |  |  |

# Project Process Plan

This section specifies the project management processes for the project. This section defines the plans for project start‑up, risk management, project work and project close‑out.

## Time Estimates

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| ID | Name | | Start | End | Duration | | Note |
| **1** | Initiation Phase | | 2010-08-30 | 2010-09-05 | 1w | |  |
| **2** | Definition Phase | | 2010-09-06 | 2010-09-12 | 1w | |  |
| **3** | Design Phase | | 2010-09-13 | 2010-09-26 | 2w | |  |
| **4** | Realization Phase   1. 1st iteration (app with basic functions) 2. 2nd iteration ( add more functions) 3. 3rd iteration (final deliverables) | | 2010-09-27  2010-09-27  2010-11-15  2010-12-13 | 2011-01-16  2010-10-17  2010-12-12  2011-01-16 | 10w  3w  4w  3w | | Exams after  Incl. holidays |
| **The entire project** | | **Aug 30th 2010 till Jan 16th 2011 (incl. exams and holidays)** | | | | **14 weeks** | |

## Process Plan

### Initiation Phase

ID: No.1

Objective: To get familiar with the project and organize the group activities

Activities:

* Discuss the assignment inside the group to get an overview of what to do
* Set up the Communication Plan and the Project Plan

Estimated schedule: Aug 30th, 2010 – Sep 5th, 2010

Estimated time: 1 week

**Deliverables**: draft of the Project Plan, User Requirements Specification

**Criteria**: The Project Plan gives an introduction of the project and how to process it in details. The communication plan explains how to hand in reports and how to keep the group members informed of the project process.

### Definition Phase

ID: No.2

Objective: To define the project requirements and collect the feedback from the client and the school tutor

Activities:

* Discuss the assignment with the client and the school tutor to collect the requirements
* Set up the User Requirement Specification document

Estimated schedule: Sep 6th, 2010 – Sep 12th, 2010

Estimated time: 1 week

**Deliverables**: User Requirements Specification, Project Plan final version

**Criteria**: The User Requirements Specification document contains the basic functions (requirements) of our application and their related descriptions.

### Design Phase

ID: No.3

Objective: To design the whole system initially

Activities:

* Gather all requirements from the client
* Set up the design document and the draft of the test plan

Estimated schedule: Sep 13th, 2010 – Sep 26th, 2010

Estimated time: 2 weeks

**Deliverables**: The design document, the draft of the test plan

**Criteria**: The design document specified the functions and designed interface of the application. The test plan implies the way to test if the application is functioning properly. The initial application should be working with basic functions.

### Realization Phase

ID: No. 4

Objective: To build and test the application and make it fully functioned.

Estimated schedule: Sep 27th, 2010 – Jan 16th, 2011

Estimated time: 10 weeks

1. 1st iteration

Objective: To build the basic functions of the application.

Activities:

* Build the initial application with the basic functions
* Improve the test plan

Estimated schedule: Sep 27th, 2010 – Oct 17th, 2010

Estimated time: 3 weeks

**Deliverables**: The initial test plan and the application with the basic functions

**Criteria**: The test plan contains all cases to test the functions of the application. The basic functions are working.

1. 2nd iteration

Objective: To add distributed system into the application and make the sorters work.

Activities:

* Gather feedback from the client and the school tutor on the initial application
* Build the distributed system and the application should be working with most functions
* Finalize the test plan
* Set up the user manual and the technical manual

Estimated schedule: Nov 15th, 2010 – Dec 12th, 2010

Estimated time: 4 weeks

**Deliverables**: The distributed application, the final version test plan, the initial user manual and the initial technical manual

**Criteria**: The test plan is complete. The user manual clearly states the steps to operate the application. Most of the functions are working. The technical manual includes installation, function model, user interface, etc. The distributed system is working.

1. 3rd iteration

Objective: To finalize the project and hand it over to the client and the school tutor

Activities:

* Improve the functions and complete the application
* Finalize all project documents
* Complete the final report and make a presentation
* Hand over the application and all documents to the client and the school tutor

Estimated schedule: Dec 13th, 2010 – Jan 16th, 2011 (incl. holidays)

Estimated time: 3 weeks

**Deliverables**: All updated process documents, the final report, the presentation and the complete functioned application

**Criteria**: The application is approved and the project is finished.

# Project Management Plan

## Money

This project does not require any financial budget. If the project is approved by the client and the school tutor, each group member will be given 12 school credits in the end.

## Skills

All group members are expected to have the following knowledge:

* Analysis, organization and design of a project
* Teamwork
* Oriental object design
* User interface design
* Programming in C#
* Documentation and presentation skills

## Risk Management

|  |  |  |  |
| --- | --- | --- | --- |
| **Risk** | **Level H/M/L** | **Likelihood** | **Mitigation** |
| **Project Definition** | | | |
| Project complexity | M: require high level programming and organizing skills | Likely | Ask for help from the school tutor and, or search related materials |
| Misunderstanding requirements | M: requirements are not clearly stated | Likely | Contact the tutor/client a.s.a.p and make an agreement with them |
| **Project Organization** | | | |
| Absence of commitment | L: individually attitude | Unlikely | Weekly meetings to report progress |
| Lack of support from school | L: tutors’ attitude | Unlikely | Report to Ms. Van der Sanden |
| Slow feedback | L: tutors are busy | Unlikely | Communicate more with the tutors and ask for feedback |

## Communication System

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Mechanism** | **Format** | **Content** | **Frequency** | **Attendants** |
| Periodic meetings | Oral | Progress report | Weekly | All group members |
| Emails | Written | Assignments, problems |  | School tutor, all group members |
| Process document | Written | Deliverables, phase progress reports | End of every phase | All group members |

## Group Working System

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Time** | **Format** | **Content** | **Frequency** | **Attendants** |
| 13:15-14:05  Monday | Meeting | Report project progress, solve problems | Weekly | School tutor, all group members |
| 13:15-14:05  Monday | Meeting | Show project progress, ask the client for feedback and make agreements | Start and end of each phase | School tutor, client and all group members |
| 14:05-14:30  Monday | Short meeting | Conclude meeting with tutor and divide tasks | Weekly | All group members |
| 13:15-17:00  Tuesday | Team work | Work on the project together at school | Weekly | All group members |
| Weekly deadline for the assignments within the group | | | 21:00, Tuesday | |
| 20:00-22:00  Wednesday | Individual work | Review all group work, make improvements and decide the final version | Weekly | All group members |
| Weekly deadline for the assignments to the school tutor/client | | | 13:00, Thursday | |
| Weekend | Individual work | New ideas for the project or improvements to the project | Weekly | All group members |

*P.S weekly working hours will be in logbook document*

## Project Finalization

* Summarize the experiences gained during the project and conclude in the final report
* Complete the project peer assessments
* Update and complete the project documentations
* Hand in the application and all documents

# Appendix

## Meeting Arrangement

|  |  |  |
| --- | --- | --- |
| Meeting Nr. | Chairman | Secretary |
| 1 | Qian | Antoine |
| 2 | Antoine | Sebastian |
| 3 | Sebastian | John |
| 4 | John | Kristian |
| 5 | Kristian | Qian |
| 6 | Qian | Antoine |
| 7 | Antoine | Sebastian |
| 8 | Sebastian | John |
| 9 | John | Kristian |
| 10 | Kristian | Qian |
| 11 | Qian | Antoine |
| 12 | Antoine | Sebastian |
| 13 | Sebastian | John |
| 14 | John | Kristian |