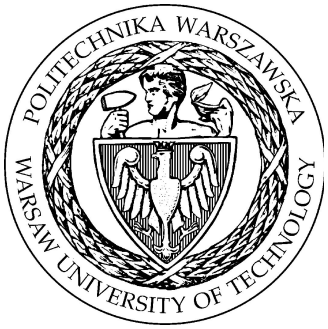
SOFTWARE ENGINEERING 2 PROJECT
COMPUTATIONAL CLUSTER



Group 4:

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1. PROJECT OVERVIEW

Computational Cluster organizes and executes time consuming computational tasks. Especially for exact optimization algorithms with o(2n) time complexity. The architecture of a system and a communication protocol design focuses on maximizing the effective usage of a resources (i.e. usage of computational power).Project will be developed in C++ and C# programming languages with the use of Microsoft Visual Studio 2012 IDE.

2. TASKS

1. Create Communication Server

a. Core of Communication Server

b. Processing messages from/to Client

c. Processing messages from/to Node

d. Processing messages from/to Task Manager

e. Crash/error handling

f. Testing

2. Task Manager

a. Core of Task Manager

b. Processing messages from/to Server

c. Dividing task

d. Crash/error handling

e. Testing

3. Computational Node

a. Core of Computational Node

b. Processing messages from/to Server

c. Crash/error handling

d. Testing

4. Computational Client

a. Core of Client

b. Integration with Server

c. Crash/error handling

d. Testing

3. SOFTWARE METHODOLOGY

1. Prepare repository
2. Prepare whole flow of app
3. Implement core of apps without remote services
4. Testing
5. Implement communication between services
6. Testing integration between components
7. Error handling and implementing algorithms

4.Milestones

Date	Who	Description
02.03.2015	Karol Muszyński	Create GIT repository
10.03.2015	Karol Muszyński Alicja Kostrzewa Hubert Hunia Łukasz Włodarczyk Michał Grabowski	Test repository and deliver to evaluate + startup documentation.
16.03.2015	Łukasz Włodarczyk Michał Grabowski	SVN repository correction.
18.03.2015	Alicja Kostrzewa Hubert Hunia	Prepare xml files.
19.03 to 23.03.2015	Karol Muszyński Michał Grabowski	Computational Client and Server create.
23.03.2015	Karol Muszyński Alicja Kostrzewa Hubert Hunia Łukasz Włodarczyk Michał Grabowski	Test communication.
29.03.2015	Alicja Kostrzewa Hubert Hunia Łukasz Włodarczyk	Final Computational Client and Server corrections.

30.03.2015	Karol Muszyński Alicja Kostrzewa Hubert Hunia Łukasz Włodarczyk Michał Grabowski	Final test of communication and deliver to evaluate.
20.04 – 27.04.2015	Alicja Kostrzewa Hubert Hunia	Logic of the algorithm
04.05.2015	Hubert Hunia Łukasz Włodarczyk Michał Grabowski	Communication of the Computational Node and Task Manager with the server.
07.05.2015	Karol Muszyński Alicja Kostrzewa	Reading data from .vrp file, Nodes functionality
08.05.2015	Alicja Kostrzewa Łukasz Włodarczyk Michał Grabowski	Partial problem dividing
11.05.2015	Karol Muszyński Alicja Kostrzewa Hubert Hunia Łukasz Włodarczyk Michał Grabowski	Testing all functionalities
11.05.2015 – 25.05.2015	Karol Muszyński Alicja Kostrzewa Hubert Hunia Łukasz Włodarczyk Michał Grabowski	Correcting minor mistakes, creating documentation and preparing for final delivery.