

Universal Computational Cluster

Start-up documentation

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1. Methodology

For our project we have chosen Scrum based approach, with some simplifications. We will start with one week Sprint, with possibility of extending it later on. Every Sprint will start and end with a meeting. On the first meeting we will choose items from Product Backlog (listed below) and divide them into smaller tasks for given Sprint. Second meeting will sum up ending Sprint.

As a replacement for Scrum Daily Meeting we will use daily reports of progress and problems from each team member, to keep communication flowing.

2. Technology

We will develop in C# .NET on Windows. For version control we will use Git. Alongside with Git we will use Gitlab for issue tracking, code review interface and time tracking. Both will be hosted on a virtual machine, shared with other teams.

3. Product backlog

Following is initial version of Product Backlog. New items may be added during project development and estimations may be changed as team gather knowledge about related items.

No.	Item	Estimated weight (1-10)
1.	Running cluster with components registration	6
2.	Handling of other messages with dispatcher mock	6
3.	Synchronization with backup server	5
4.	DVRP research	8
5.	Algorithm implementation	9
6.	Real data dispatching logic	7
7.	Integration of whole system	3
8.	Fully working interaction with other teams product	3

4. Tasks for Sprint 1

1. Prepare communication tests outline
2. Create wrapper for message sending
3. Initial server implementation with parameters handling
4. Initial node implementation with parameters handling
5. Initial task manager implementation with parameters handling
6. Initial client implementation with parameters handling
7. Registration handling on server side
8. Computational node registration
9. Task manager registration
10. Computational Client registration