The Project Game

For the beginning is thought to be more than half the whole.

- Aristotele, Nicomachean Ethics

Group Instructor - Janusz Rafałko

Team 17-PL-12 - Maciej Grzeszczak, Henryk Kaczmarski, Sebastian Konowrocki *(leader)*, Kajetan Kotas. Stanisław Wasilkowski.

Software Technology

The Project Game is implemented using .NET 4.5.2 framework and written in C# programming language. The main reason for that choice is that every member of the team is familiar with these to at least satisfactory extent. Besides that there is a wide range of avaliable programming libraries and mature community around that platform.

Methodology

Methodology used to manage product development is **Scrum**. It is one of the most popular software development framework nowadays and learning that may be beneficial for team members as they acquire necessary experience. We are working in one week sprints and holding stand-ups every two days (since meeting every day is really difficult to impossible).

Roles according to Scrum methodology:

- Scrum Master Sebastian Konowrocki
- Product Owner Stanisław Wasilkowski
- Developers Team Maciej Grzeszczak, Henryk Kaczmarski, Sebastian Konowrocki, Kajetan Kotas, Stanisław Wasilkowski

In order to help and improve our cooperation we use <u>Slack</u> as our communication platform, where we consult our problems and solve them efficiently and quickly. Tasks are organized with the help of <u>Trello</u> service, where everyone can get instant information about what is left to do and who is working on which task currently. This is also the place where user stories, product backlog and summaries of the Scrum sprints are being kept, so everyone can access it at any time. Changes in code are tracked with Git version control system. Elected branching model and commit naming convention is inspired by <u>Gitflow Workflow</u> which is enforced <u>strictly</u>. Development branch is synchronized with TeamCity <u>continuous integration</u> server to prevent integration problems and to ensure that project passes test after every significant change is made. TeamCity server is hosted on Azure cloud computing service.

Preliminary work schedule

- laboratory 2 (10.03) delivering intial project documentation.
- **laboratory 3** (17.03) delivering final project documentation. Planning the first sprint (Communication). Main goal of this sprint is to create initial projet setup, create coninuous integration environment and prepare working base of communication server where most of the funcionalites are still mocked.
- **laboratory 4** (24.03) working prototype of communication, implemented messages models, working communication server, Player and GameMaster mocked mostly. Planning the second (Game) sprint, review and retrospect of the first sprint.
- laboratory 5 (31.03) planning the third sprint (Game), review and retrospect of the second sprint.
- laboratory 6 (07.04) planning the fourth sprint (Game), review and retrospect of the third sprint.
- laboratory 7 (12.04) working prototype of a whole game, implemented game rules, ability to play sample game, Communication Server can serve multiple games. Client's, Communication Server's and Game's configurations are kept and read from configuration files. Planning the fifth sprint (Cooperation), review and retrospect of the fourth sprint.
- **laboratory 8** (21.04) planning the sixth sprint (Cooperation), review and retrospect of the fifth sprint.
- **laboratory 9** (28.04) planning the seventh sprint (Cooperation), review and retrospect of the sixth sprint.
- **laboratory 10** (5.05) planning the eighth sprint (Cooperation), review and retrospect of the seventh sprint.
- **laboratory 11** (12.05) module responsible for basic artificial intelligence. Planning the ninth sprint (Cooperation), review and retrospect of the eighth sprint.
- **laboratory 12** (19.05) improvement of compatibility with other groups solutions. Planning the final sprint, review and retrospect of the ninth sprint.
- laboratory 13 (26.05) championships. Review and retrospect of the final sprint.