IVS - Project 2 - Calculator - Plan

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1 INTRODUCTION

As a project from the subject IVS we got assigned to create a calculator. It should support basic mathematical operations (+,-,*,/), factorial(!), exponentiation (x^n), common root $(f(x,n) = \sqrt[n]{x})$. We decided to create it in programming language C++.

2 MAIN GOALS

- Learn how to work in a team
- Try new programming language, tools and techniques
- Get corresponding rating of the project (the higher the better)
- Improve our skills

3 RISK ESTIMATION

- Unfamiliarity of programming techniques, language etc.
- Location of team members
- Inadequate time management
- Inexperience of team members in particular domain

SOLUTIONS:
We have dealt with risks mentioned above as following:

1. We read the documentation, found some information about the topic and practise as much as possible.

2. Unfortunately because of the current situation we have to stick with communication via internet.

3. Every deadline we marked into the calendar and charged one person, who has to keep an eye on it.

4. Since we are inexperienced freshmen and everything is new for us, we try to support each other. If someone has more experience in a certain domain, they will help others and vice versa.

4 DEADLINES

15/3/2020	GitHub repository, Jira scrum board
18/3/2020	plan
22/4/2020	final product
30/4/2020	installation of the product
8/5/2020	problems
14/5/2020	public presentation of the product

5 TASKS AND RESPONSIBILITIES

Individual tasks:

Michal Višňovský(xvisno01): Team leader, GitHub repository setup and management, math library, GUI

Natália Marková(xmarko20): documentation, manual, plan, in charge of adherence to dates

Tereza Burianová(xburia28): testing, manual, Jira scrum board setup and management

Boris Bobocký(xboboc01): installation, GUI, math library

Tasks are divided equally between each team member.Each member, in addition to the individual tasks, works on application development with others in range depending on the difficulty of their individual tasks itself.Each member also subsequently checks the performance of the other team members.Any discrepancies in development are consulted on chosen communication channel.

6 COMUNICATION

6.1 Discord

We chose Discord as a communication channel, as it is familiar to every member of the team. The channel is designed only for the purpose of this project. We created subchannels in which we will solve the problems associated with the specific thing.

Existing subchannels:

- plan

- deadlines

- tests

- calculator

- useful links

We also use voice channel more often, because the members of the team are living in Slovakia and Czech Republic, therefore personal meetings are more difficult to arrange.

6.2   Jira scrum board

We chose the **scrum** development methodology.
Jira is a task system through which we can keep order and overview in the tasks associated with this project.It is a very transparent system, which has many options - including the division of tasks into categories - what needs to be done, what is being done, what is done.

6.3   GitHub

Github was chosen to hold our data, we created a repository in which we develop and build our project.
User *ivskontrola* was granted access to our repository at `https://github.com/ MichalVisnovsky/Hobbit-Gang-IVS`