



## Project #1 – Build your own game

### Project Description

This project is the first time you will create your own software. You will be working in pairs of two. The task is to create an interactive program, where the user provides inputs and the program responds with outputs. This project is all about functional programming. By functional programming we mean that you should build functions that interact with each other. An important guideline to have in mind during the project is that the functions you build should only solve one problem each.

During this project you will practice pair-programming, which means that you will code as your partner observes your coding, and then you switch and take turns.

In this project, the following rule will be your main guide:

### **KISS (Keep it simple, stupid)**

Also, before you start to code, you need to plan your project using Trello Board.

### Project Goals

- Build your own program from scratch
- Initiate your GitHub repository
- Get experience in presenting technical solutions

### Project Requirements

The following requirements are **mandatory**.

- The project must be planned beforehand – Use Trello Board
- Throughout the project you will do pair-programming, for example 1h switches
- The code must include functions
- The program must include inputs and outputs
- The project will be presented in front of the class
- Hand in the project (slides, notebook etc.) before presenting

## Presentation

The presentation should take max 7 minutes (including game demo)

- The slides should include the following (not necessarily in this order):
  - Title of the project + Student name
  - Description of the game
  - Challenges you faced
  - Ideas about possible future improvements of your game/code
  - Highlights
- The slides should NOT contain code

## Games/Programs to choose from

### Games

- Hangman
- Risk
- Blackjack
- Pong
- Craps

### Programs

- Message encryption and decryption
- (Strong) Random password generator
- Binary Search

## Schedule

**Before first line of code:** Plan your project for 1-2 hours → Check in with Teachers

**When are presentations?:** Teachers Announcement



**Good Luck!!**