

Mini Project: A Mastermind Game.

The mini project requires you to write a java version of the classical code breaking Mastermind game.

The game sets a secret code by choosing a number of random colors (from a pool of 6 colors) in a certain order and the players goal is to guess the code. The game will notify the user if any colors are right and or if some of them are in the right position after each guess.

Read the [wikipedia page](#) for a complete description of the game. [Play it here.](#)

The mini-project is the foundation for the oral exam.



Delivery Requirements

You must hand in your complete project and all source code required to compile and run the application. You are encouraged to hand in a brief documentation (maximum of two pages including everything - e.g. illustrations) to explain your code and the ideas behind it. Your project can either be a GUI or a console application

Evaluation criteria

Your program will be evaluated on the basis of the following elements

- **Functionality.** The Application should work as expected, be playable by the user, and provide the necessary feedback (game won. how many colors that are correct and how many are in the right position)
- **Reflection on the course.** You are expected to use elements from the course in your solution
- **Well organized code.** a good simple architecture with a clear logical breakdown of the code in the methods and classes that helps to a better understanding of the code
- **Error Handling.** Try to make sure that the application is solid and can handle incorrect input and or other possible errors
- **Project Description.** In order to make sure your ideas and code isn't misunderstood add a short description (max 2 pages) about your solution

About the exam (from the course description)

The exam will be a 15-minute individual oral exam. The exam will mainly be about the assignments (especially the mini project) but questions can be related to the whole course curriculum.

Plagiarism

Notice that it is alright to find inspiration on the Internet, but DO NOT copy paste! If you choose to use parts of other people's code make sure you give them credit for it and understand their code fully as you will be examined in all the code as had you written it yourself.

If you find code somewhere and want to use it as a part of your solution you should add a comment and write exactly where your code is copied from. Take ownership of the code - You must be able to explain any part of the source code.

Working together in groups

You can work alone, in pairs, or groups of up to 3 persons. Clearly state the names of all group members on each page of the documentation.

Deadline

Your solution and description must be uploaded to onlineeksamen.ruc.dk eksamen.ruc.dk before 26/11 23:59

Do not hesitate to contact us if you have any doubts at all.

Regards

Ebbe, ebbevang@ruc.dk

Keith, keithl@ruc.dk