

# CS1102 Final Project

## 1 Project Description

We would like you to demonstrate everything you have learned during this course in your final project. It should be a fully-fledged C++ program, written entirely from the scratch by you, satisfying the requirements specified below. We are not forcing you to work on anything specific – you can come up with any idea that you want for the final project. Possible ideas include:

1. Games (can be multi- or single-player; no AI needed):
  - Card games (e.g. Blackjack, Poker)
  - Reversi
  - Gomoku
  - Connect Four
  - Maxit (very simple – two players just move around a grid from space to space, alternating turns, and each space has a number which gets added to your score; Google for more)
2. An in-memory database (no need to save data to files) in which the user can enter/-modify/view records. For instance, you might make:
  - A database of SUZA students, classes they take, etc., allowing adding, removing students, etc.
  - A database of sport results, fixtures, statistics, players, etc.

## 2 Requirements

1. Your project should be large enough to take about 10-15 hours of coding.
2. Your project proposal needs to be approved by the staff first.
3. Your project must make use of all of the following:

- Functions
  - STL (Standard Template Library)
4. You may not use any other external libraries (e.g. for graphical interfaces). Generally a good rule of thumb is that if something was not covered in this course, you should probably not use it (if in doubt, email us!). Stick to a text interface.
  5. It is very important that you write easily readable, well-designed code.
  6. Include a README file, with some basic documentation and instructions on how to use your program. Also include in this README what problems you had with your project, what the challenges were, and what would you have done differently if you could do it again.

### 3 Deadlines

- **26 February (Friday) – The project proposal:**

Send us a short project proposal, sketching briefly what your project will do and how it is going to satisfy the requirements. Please limit yourself to at most half a page (the proposal won't count toward your final grade)

- **05 March (Friday) – The final project: Send us your project, satisfying the**

requirements. Pack everything into a single .zip file (i.e. your code and the README file). You will get bonus points for the use of more advanced C++ features.

CS1102 Introduction to High Level Programming Language  
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