

# FYP - RISKS AND UNKNOWNNS

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## 1. RISKS AND UNKNOWNNS

These are the potential risks and unknowns for the final year project and how best they can be mitigated if possible:

- The delivery of the Morello board could be delayed or damaged.
  - The Morello board was delivered successfully, without damage, before the project began.
- I am unfamiliar with C/C++ programming languages. The programming language required for use in my project is Cheri C/C++, which is a modified version of these languages.
  - I will create some basic sample applications in C/C++ to familiarise myself with the languages and the compilation process.
  - I have colleagues at work and university who have good experience with C/C++, so I can ask for help when necessary.
- There is limited documentation available on CHERI, CheriBSD, and Morello.
  - I have two colleagues at work who have experience with CHERI and CheriBSD, and I have been given a contact who has experience using the Morello board.
  - There is a Morello community forum on ARM's website which I can use to ask any further questions I need.
- The Data Plane Development Kit (DPDK) framework has limited use with CheriBSD, and none while using the Morello platform. Therefore, there could be missing functionality.
  - I may need to port some other libraries to get all required functionality from the DPDK library.
  - I have structured the project schedule to allow for a potential delay with this stage in development and still complete the work before the final deadline.
- The testing methodologies are vaguely defined for the application I produce and therefore may not be feasible.
  - There is a meeting scheduled in November with representatives of the DSbD programme, in order to develop a clear and feasible testing strategy.