Faster-Than-Caml

Members:

- Young Kim (yk465)
- Kevin Chan (kc626)
- Megan Le (ml944)
- Wendy Zhang (wz276)

Plan for Regular Status Meeting:

- Tuesdays at 4PM, Thursday Nights

Project Proposal:

We plan on creating a game based on the PC game **Faster than Light** in OCaml. The game has a fairly simple concept: you control a spaceship in a rougelike game (meaning if you lose you have to restart), where your goal is to reach the final ship and destroy it.
At any point, your ship is on a planet on a randomly-generated galaxy. Upon visiting a planet, one of four events is possible: a battle with an enemy ship, an encounter with a store, a text-based event where you have to make a decision, or no event at all. The 'currency' of the game is **scrap**, which is used for ship upgrades, store purchases, and can be used to bribe enemy ships.
Your goal is to strategically choose planets to visit through the various galaxies and constantly balance risk/reward, amassing upgrades while staying alive.

Key features:

- Representing the game using OCaml Modules, and developing unit-tests
- Creating an initial text-based version of the game, and fully testing this version
- Creating a GUI for the game, and play-testing

System Design:
We plan on splitting the game up into as many components as possible, to make testing easier and dividing up work easier also. The modules we have so far, not including the GUI, are:

  - main (runs the game)
  - ship (representing the state of the ship)
  - map (representing the map of the specific galaxy)
  - event modules: battle_event, store_event, decision_event.

We expect that this list will expand as we choose to submodule more aspects of the game.