Developing programs

- **What's the purpose of a Makefile?**
  - Dependencies, recompiles
  - Environment dependencies
  -

- **How does a makefile work?**
  - Key features: target, dependencies, command(s)
  - When target is invoked, changes in dependencies can cause command(s) to execute
  - What's the silly Makefile tab rule? Continued lines?

- **See Makefile guide on class resource page**

Inheritance issues: piles, Freecell

- **What's Deck, what's a Pile, what's a BoardPile?**
  - What is behavior of deck? Different from BoardPile?

- **C++ issues in header files**
  - Where is Displayer declared? Why no #include in pile.h?
  - In general avoid header-file dependencies

- **What about pure virtual functions?**
  - Code duplication in pile.cpp, how can we avoid this?
  - Can we use multiple inheritance?

Exceptional situations

- **Do we always need to check if we can add a card to a pile?**
- **Do we need to check that we can take a card?**
- **What do we return from `takeCard` when there are none?**
  - Require user to check precondition, but then what?

- **We can use exceptions**
  - Throw exceptions
  - Catch exceptions
  - See pile.cpp for details

Toward MVC in Freecell

- **Scenarios in playing?**
- **What is model of game?**
  - State
  - Behavior

- **Developing prototype**
- **What to do with no GUI**
  - Selecting piles?
  - Options?

- **What is view of game?**