

## Final Project Proposal

### Tea Database

Our project idea is to make a tea database. The user will choose between what symptoms they have and what taste they would prefer, and the terminal will return a suggested tea.

- Major concepts we plan to account for/use
  - Interface
  - Typecasting
  - For loops, for-each loops, while loops, recursion
  - Compound assignment operators
  - Scanner classes
  - Arrays, wrapper classes
  - Exception handling
  - Abstract classes
  - Generic typing
  - Searches - linear, binary
  - Sorts - Selection, Insertion, Bubble

A specific tea will have its own class with its own symptoms that it can remedy and flavor. We are debating whether we are going to use an interface or an abstract class for a general Tea.java file. We will either use one or the other, if not both. Whichever we choose will contain the general method shared by all the specific tea classes, and possibly instance variables.

Each specific tea class will have variables listing the symptoms they can remedy and flavors. They will print out their traits and background information, as well as information on how to make tea and citations.

Keyboard.java will be imported to allow the user to input their symptoms and preferred flavor.

Alternatively, they can just input the name of the tea to get its information. The inputs should not be case sensitive and invalid inputs will prompt the user to try again. The user may receive the ability to return to the “start menu”

Our stretch goal may be to allow the user to add teas to the database, which requires giving the user the ability to create new classes.

Teas covered in the database

Start out with 4 and slowly add more as we develop the versions

- Chamomile: stress, sleep, skin care, stomach
- Peppermint: fever, stress, digestion, nausea
- Ginger: nausea, stress, digestion
- Green: headaches, sleep, stress, nausea, aging
- Lemon, Oolong, White, Black, etc.