Final Project Checklist

CS334 Spring 2022

(a) _____ You have created either a short (1000-word) tutorial for your language or a 5-10 minute video presentation, and included this tutorial or video with your implementation. Note: large video files cannot be added to GitHub; please include a link to Google Drive/YouTube/etc. instead.

(b) _____ Your project has a (silly) name.

(c) _____ Your project has a specification.

(d) _____ Your parser is in a file called `ProjectParser.fs`.

(e) _____ Your interpreter / evaluator is in a file called `ProjectInterpreter.fs`.

(f) _____ Your `main` function is in a file called `Program.fs`.

(g) _____ Your project compiles (this is **very** important).

(h) _____ Your project runs (this is **very** important).

(i) _____ Your language "does something." It prints out a computed result, it generates a file, etc.

(j) _____ **You are sure to tell the user** (me) what the expected result should be!

(k) _____ Your implementation has a test suite and it runs.

(l) _____ There is at least one test written for the parser.

(m) _____ There is at least one test written for the interpreter.

(n) _____ Your project can be run at the project level by calling `dotnet run <input>` or at the solution level by calling `dotnet run --project <whatever.fsproj> <input>`.

(o) _____ Your specification document has a title.

(p) _____ Your name and your partner's name is written at the top of the spec.

(q) _____ Your specification has an **Introduction** section consisting of **2+** paragraphs.

(r) _____ Your specification has a **Design Principles** section consisting of **1+** paragraphs.

(s) _____ Your specification has an **Examples** section consisting of **3+** short examples.

(t) _____ Each of your examples is provided (and ideally, each example is in a separate file) so that an interested third party (me or one of your classmates) can run them. Instructions to run the examples is provided.

(u) _____ Your specification has a **Language Concepts** section consisting of **1+** paragraphs.

(v) _____ Your specification has a **Formal Syntax** section consisting of **as much BNF is needed** to completely describe your language's syntax.

(w) _____ Your specification has a **Semantics** section consisting of **one short description per language element** (where an element is normally an AST node), completely describing your language.

(x) _____ Your specification provides enough detail that an interested third-party (like me or one of your classmates) can write a new program in your language.

(y) _____ If syntactically valid but meaningless programs are possible, make sure that the program detects these cases and shuts down cleanly (i.e., the user does not see an exception).

(z) _____ You committed your specification to a branch called `final-submission`.

(α) _____ You committed your implementation, in a folder called `lang`, to a branch called `final-submission`.

(β) _____ Your specification has a **Remaining Work** section that describes further enhancements, if any, you would like to see. If your prior draft had features that you did not get to by the final submission, briefly explain why you were not able to implement them.

(γ) _____ If you would like me to transfer ownership of your repository to you, please provide the name of a Github user or organization that will take over ownership. Put this username in a file called `TRANSFER.txt`.

(δ) _____ If you intend to make your repository public, put a LICENSE.txt copyright statement in your repository, at the root level, so that people know under what conditions you plan to let them use your code. For example, provide a copy of the GNU Public License, or BSD License, etc.