EECS 22L: OCR Alpha Release

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The third deliverable in the OCR project is the alpha version of the OCR program for the user, as well as the corresponding alpha version of the program source code and documentation. While certain shortcomings are expected for an alpha version (e.g. the program recognizes characters incorrectly, croppings are not precise, it sometimes crashes, and/or several of the optional features are incomplete), the deliverables should give a good impression of the state of the implementation and provide an early "preview" of what the final release will be.

As discussed in the lectures, emphasis should be given to the testing of each stage of the program.

For full credit (100%), the binary package "OCR_Alpha.tar.gz" for the user should include the following file hierarchy:

README

- author, version, date, general instructions...

COPYRIGHT

- author and copyright

INSTALL

- installation instructions

bin/

- binary directory
- **bin/ocr** - the executable OCR program

doc/

- directory for documentation
- **doc/OCR.pdf**

For full credit (100%), the source code package for further developers should include the following file hierarchy:

README

- authors, version, date, general instructions...

COPYRIGHT

- authors and copyright

INSTALL

- installation instructions (how to compile, install, and test)

Makefile

- top-level, tool-specific Makefile

bin/

- binary directory

doc/

- directory for documentation, report, etc.

- **doc/OCR.pdf**

- **doc/OCR_Software.pdf**

inc/

- include directory, with all header file(s) or symbolic link(s) to header file(s)

- **inc/OCR.h**

- **inc/others.h**

src/

- source directory, with all source code files

- **src/Makefile** - Makefile for sources

- **src/OCR.c**

- **src/others.c**

test/

- test directory, with test setup for each of the pipeline stages' functionality and their separate inputs and outputs

- **test/test_io.c** - check the read and write image functions

- **test/test_preprocessing.c** - check preprocessing functions, such as image rotation

- **test/test_cropping.c** - check cropping functions, such as character cropping

- or similar

Note that the source code package should include all files needed to build, install, and test the software. In particular, the toplevel **Makefile** should support the following:

```
% make
% make test-gui
% make test-io
% make test-preprocessing
% make test-postprocessing
% make clean
```