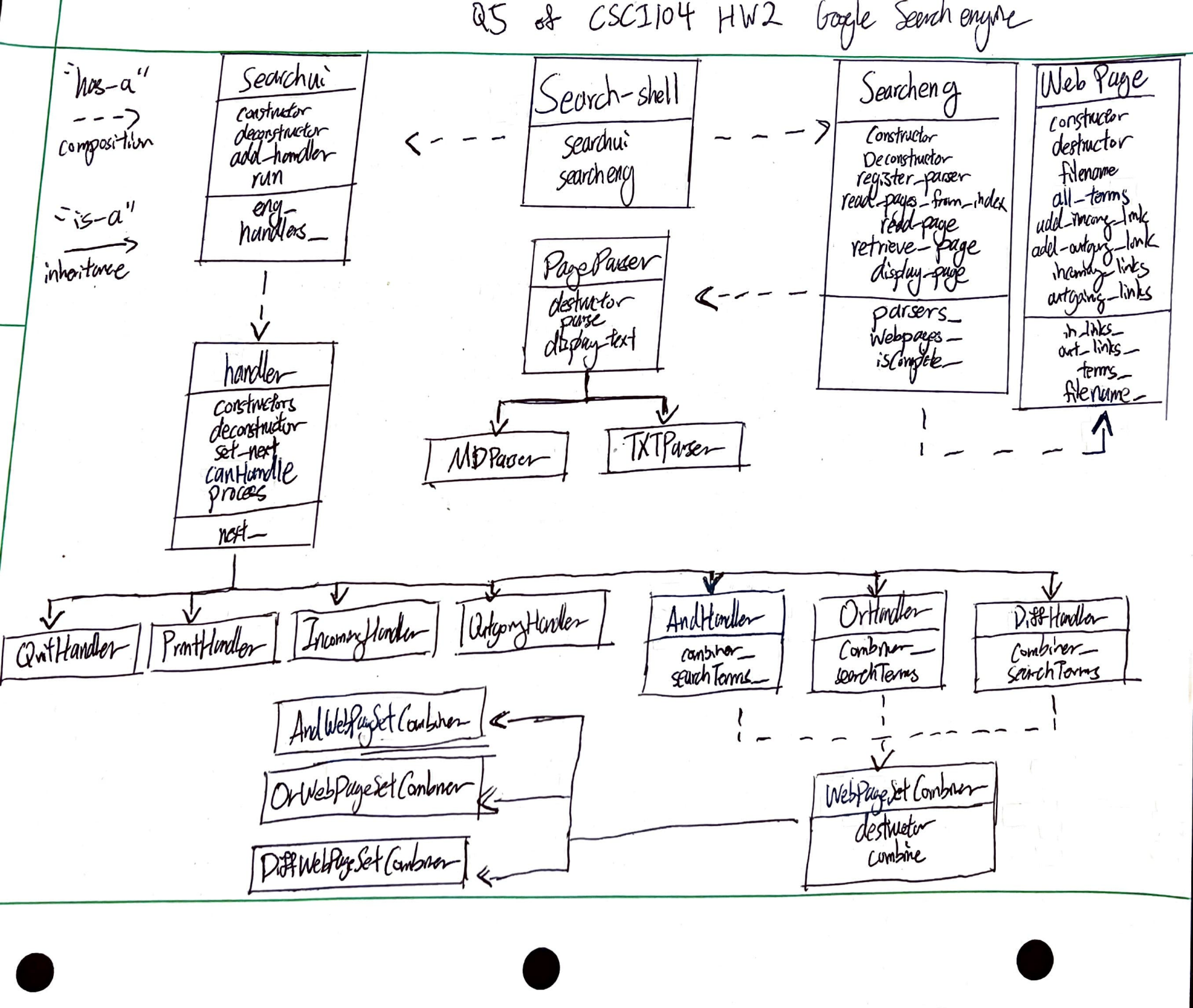
Q5 of CSCI104 HW2 Google Search engine



1. We have an abstract PageParser class because PageParser itself cannot parse a page unless it is inherited by a specific parser class. Hence the PageParser class is just a blue print for specific parser classes, thus should be abstract so one can't define a PageParser.

   The virtual parse function acts to allow different file parsers to implement their own way of parsing, and when called upon a PageParser pointer the compiler should execute the correct parse version for the specific parser.

2. The virtual process function acts to allow different handles/cmd to implement their own way of processing. For instance process for QuitHandler and PrintHandler should be different because the handlers have different usages. When called upon a Handler pointer, the compiler will execute the correct process under the pointed handler class.

3.
   SearchUI::run() calls AndHandler::process()
   AndHandler::process() calls SearchEng::search()
   SearchEng::search() calls AndWebPageSetCombiner::combine()

note: the output of combine() gets display through displayHits() in process()