

CSC104 project #1

Due November 9th, 11:59 p.m.

This project gives you some more experience with image manipulation, big-bang event handling, writing definitions and (check-expect ...) expressions.

Your first task is to download the file `clock.rkt` from the calendar entry for November 9th on the [course web page](#). You should be able to right-click on the file to save it to the machine you are using to work on it.

If you open `clock.rkt` in DrRacket (Intermediate Student with lambda) and click “Run”, it won’t behave properly. It’s meant to be a clock with working minute, hour and second hands, but many features were disabled and you’ll have to fix them. In addition, there will be some tests generated by (check-expect ...) that will fail.

Your job is to look through the file for comments of the form:

```
; !!! <some sort of instruction>
```

...and carry out the instruction. Usually you will be asked either to write some (appropriate) (check-expect ...) expressions, or fix some function. If there is already a (check-expect ...) expression, it probably provides good clues on how to write the related function. If there is already a function, it probably provides good clues on how to create a (check-expect ...) function.

Once you find and carry out all the instructions, you should have a clock with working hour, minute, and second hands. If you find the existing hands unbearably cheesy, you are welcome to replace them with other images of your choice, but this earns you no extra credit.

When you are finished, submit **two** files to the MarkUs link on the course calendar:

- Your fixed-up version of the file `clock.rkt` saved using the menu File>Save as
- The same file renamed `clock.scm` saved using the menu File>Save Other>Save as text...

Be sure to submit whatever you have finished by November 9th, even if it’s incomplete. You will likely get some credit.

I will provide hints, on request, in the form of references to relevant portions of [Picturing Programs](#), course materials, or documentation.