

Software Engineering Challenge

### <u>Requirements</u>

Describe the challenge or problem, what does the program need to do

- Flashing windows
- Moving clouds, fish, cars (possible)
- I also actually have to draw the images of the buildings and fish
  - Fish circle triangle
  - Bridge semicircle rectangle
  - building lines/rectangles
  - clouds group of small circles
  - grass group of large circles

What classes/objects do you think you need?

- Fish
- Bridge/Floor/grass/building (non moving)
- Care
- Flashing windows
- Moving clouds

How much time do you think you will you need to complete the project?

- Possibly 6 days

#### Research

What knowledge or skills will you need to build this program

- Threads, set background/color, fillRect, drawRect

Do you foresee any problems or constraints, describe Have you created a similar programs? Are there similar programs in the book or other resources?

If so, what elements of that project can you bring to this project?

- I think one big obstacle is just getting used to the draw methods, and I think the sample programs like floor and stick figure can help

Do you have the resources you need to create the program?

- Yes, hayes, textbook, friends, sample programs

Do you need to learn any new knowledge or skill(s) to create the program?

Arrays aren't needed to complete the program, but they could be a big help. As a result, I
may skim over chapter 6

#### <u>Design</u>

Draw/create a basic graphic you plan to build - attach the drawing (paint, word, photo shop) not every objet (draw one example although there may be several in the final program) needs to be in the basic graphic

Include a task list--what will you need to do and in what order

- 1. Set bridge floor 1 days
- 2. Set actually bridge 2 days
- 3. Make building and the windows- 2 days
- 4. Fish, clouds, and cars 1 day

Estimate the amount of time you will need to complete each part the project

## Construction - included in summary doc

Document your construction progress with date and progress made (build a chart/table in word or excel), also, include at least three screen shots of your city (beginning, middle, and end)

# Testing/Results/Delivery-summary doc not required to start project

Preliminary testing

Does your program meet the needs of the initial challenge or problem? How do you know?

Are any changes or modifications needed, why or why not? Document any changes. Summarize the project - what worked, what didn't work, note your successes and/or failures.

Looking back, would you have done anything differently, why or why not

Software Summary Document

Daily Progress Report

Date	Description
January 16, 2017	