**1.** **Initiation**

* Resources required:
  + 2 computers ($800)
  + 2 programmers that have the knowledge of project management, computer science, and how to code in drJava (Free)
  + DrJava downloaded in the Computer (Free)
* Time to create program:
  + A couple of weeks (about 2-3)
* Goal / Scope:
  + Create a working Connect 4 program
  + Should include GUI and the actions performed
* Schedule:
  + Day 1-3: Create Algorithm
  + Day 3-13: Have the basic code in drJava
  + Day 13-15: Add GUI
  + Day 15: Bug fixes and comments

**2.** **Planning or development**

* Scope:
  + To create a working Connect 4 program with GUI in drJava
* Time:
  + Approximately 3 weeks
* Cost:
  + $800
* Creation of the algorithm:
  + (Written in a separate document)
* Activities:
  + Test the program to make sure no bugs in the program
  + Connect 4 Tournament with player vs. player and player vs. AI
* Schedule:
  + Day 1-3: Create Algorithm
  + Day 3-13: Have the basic code in drJava
  + Day 13-15: Add GUI
  + Day 15: Bug fixes and comments
* Possible risks and solutions:
  + Getting stuck on some parts of the program consumes more time.
    - Solution: Extend the time needed for the project or work overtime
  + Unexpected errors occur.
    - Solution: Try to fix the errors as soon as possible and extend time if needed.
* Gain formal approval to begin work

**3.** **Production or Execution**

* 1 week before programmers code Connect 4, buy 2 computers
* Within a couple of days after buying 2 computers, set them up
* A few days before, download drJava and make sure everything is set up alright
* The day the 2 programmers start the Connect 4 program, set them each with a computer and have them prepare an algorithm of the Connect 4 program within 1-2 days.
* After the creation of the Connect 4 program’s algorithm, open drJava and start coding the basic coding of Connect 4 (actions performed)
* Within 1 week of coding, the basic code of the action performed should be finished and the programmers should start adding the GUI into the program
* Within another week, everything should be done and final touches should be made
* 1 day before the Connect 4 tournament, add comments and check if bug fixes are needed.

**4.** **Monitoring and Controlling**

* Check to see if the computer/laptop is in good condition
* Check frequently to see if all the programmers (us) stay on task

**5.** **Closing**

* Finalize all activities
  + Run the program once more to make sure everything runs smoothly
  + Bug Fixes and Comments
  + Prepare and get ready for the Connect 4 tournament