

US 12A – Computer Games as Art, Culture, and Technology  
Final Exam – Dec. 8, 2006

First Name \_\_\_\_\_ Last Name \_\_\_\_\_

Circle your discussion section: Garnet, 10:00   Jeff, 11:00   Jeff, 1:00   Garnet, 2:00

Each of the nine questions on this Final Exam is worth the same number of points

1. Strategy games on the computer have their historical conditions of possibility in risk-reward calculations and military scenario planning. Role playing and adventure games have some historical conditions of possibility in network routing, and in cave exploration as one early implementation of what is possible in translating dungeons and dragons play to the computer. What are some of the historical conditions of the speed and graphic user interfaces that we associate with a typical action game?

2. Although action games and RPGs or adventure games are different in many ways, both are about exploring computer space. Talk about some ways in which both action games and adventure or role-playing games can be enriched by user-generated content.

3. Are computer games merely a way for humans to adapt to computer technology? Or is "Spacewar" (for instance) a work of art? Carefully argue one way or another.

4. What is your favorite game? Explain your choice with concepts from the course.

5. If you wanted to put a picture of your face onto a character in a computer game, describe a set of tools you might use, and how these tools fit together into a production pipeline.

6. Arrange the following tools into a taxonomy where no node has more than two child nodes: Photoshop, a digital camera, Audacity, 3D Studio Max, a microphone, a computer keyboard, an optical scanner and a pencil. The tools should appear on the leaves or fringes of the tree you draw. Please label each node with the characteristic that all of its children share.



9. Fill in the correct Java code where you see underlines, so that the code matches what the comments above it say.

```
void draw()
{
    canvas.clear();

    // Adjust rocketX to move rocket to the right
    _____;

    // If any part of the rocket is past the
    // right hand edge of the canvas,
    // make the rocket disappear.

    if ( _____ )
    {
        _____;
    }

    // Adjust balloonY to move the balloon
    // up by 1 pixel.

    _____;

    // If the top of the balloon is touching
    // the top of the canvas,
    // move the balloon down so its middle
    // is at the vertical middle of the canvas.

    if ( _____ )
    {
        _____;
    }

    rocket.position(rocketX, rocketY);
    balloon.position(balloonX, balloonY);

    rocket.draw();
    balloon.draw();
}
```

A solution for above Java problem:

```
void draw()
{
    canvas.clear();

    // Adjust rocketX to move rocket to the right
    rocketX = rocketX + rocketSpeed;

    // If any part of the rocket is past the
    // right hand edge of the canvas,
    // make the rocket disappear.
    if (rocketX + rocket.width() > canvas.width())
    {
        rocket.hide();
    }

    // Adjust balloonY to move the balloon
    // up by 1 pixel.
    balloonY = balloonY - 1;

    // If the top of the balloon is touching
    // the top of the canvas,
    // move the balloon down so its middle
    // is at the vertical middle of the canvas.
    if (balloonY == 0)
    {
        balloonY = canvas.height() / 2 -
balloon.height() / 2;
    }

    rocket.position(rocketX, rocketY);
    balloon.position(balloonX, balloonY);

    rocket.draw();
    balloon.draw();
}
```