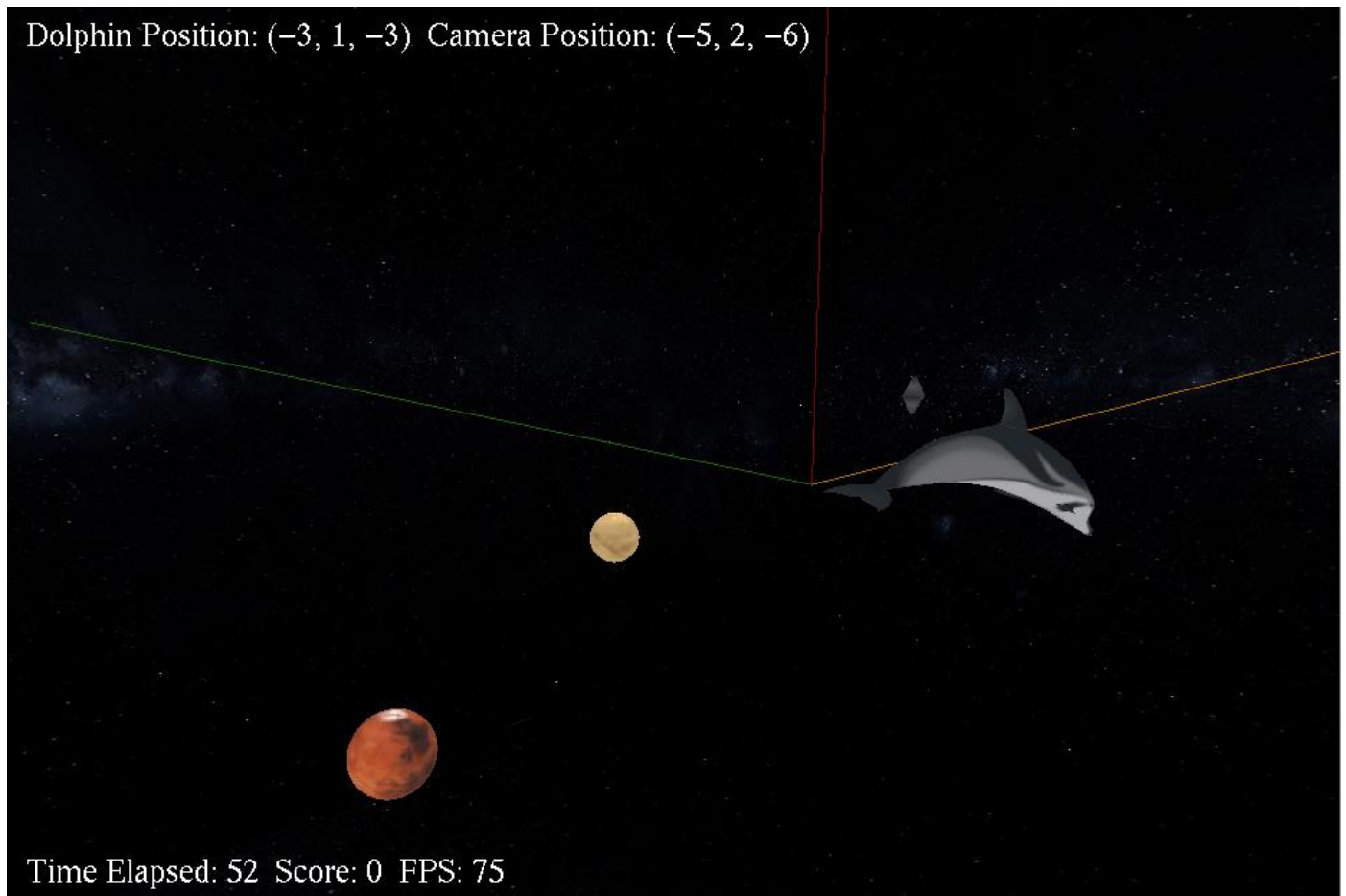


# **Dolphin Explorer - Player Guide**

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CSC 165-02  
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### Compiling and Running the Game from the Command Window:

The game can be compiled and ran from the command window by opening a CMD inside the game directory and running the following commands

- `javac a1\*.java`
- `java -Dsun.java2d.d3d=false -Dsun.java2d.uiScale=1 a1.MyGame`

Alternatively, you can just use the provided batch files to perform this operation. Double click on [compile.bat](#), then double click on [run.bat](#).

### Game Controls:

#### Keyboard Controls

Move Dolphin Forward: **W**

Move Dolphin Backward: **S**

Move Dolphin Left: **A**

Move Dolphin Right: **D**

Pitch Dolphin Up: **Up**

Pitch Dolphin Down: **Down**

Yaw Dolphin Left: **Left**

Yaw Dolphin Right: **Right**

Get On/Get Off Dolphin: **Space**

Look at Dolphin (while off Dolphin): **Tab**

Look at Planet (while on Dolphin): **Tab**

## Gamepad Controls

Move Dolphin Forward/Backward: **Y-Axis (Left Stick)**

Get On/Get Off Dolphin: **Button 1**

Move Dolphin Left/Right: **X-Axis (Left Stick)**

Look at Planet (while on Dolphin): **Button 6**

Pitch Dolphin Up/Down: **RY-Axis (Right Stick)**

Look at Dolphin (while off Dolphin): **Button 6**

Yaw Dolphin Left/Right: **RX-Axis (Right Stick)**

### **How to Play My Game:**

While on the dolphin travel towards planets. When near a planet, get off the dolphin and travel even closer to collect the planet and increase your score by one! The object orbiting the origin will grow every time you collect a planet. Note, for each planet collected, another planet spawns.

### **Additional Game Activity:**

When the player gets close to a planet in 'c' mode, the planet will rapidly decrease in scale before disappearing from existence. This was implemented using a custom scale controller that is passed all the planets that the player has collected.

### **Additional Game Object:**

Orbiting the origin of the game world, there is a Rhombus that was manually defined in the game code. This Rhombus initially starts small, but for every planet collected, it increases in scale by 0.2 units in every direction.

### **Missed Requirements:**

All the requirements for this project were successfully implemented.

### **Additional Modifications:**

- Added a Skybox
- Added collision detection between the dolphin/camera and the planets. Note, no collision detection between the dolphin and camera and/or between the dolphin/camera and the orbiting rhombus
- For every planet removed, another planet spawns
- FPS calculation is shown on HUD
- Implemented a LookAt action that looks at the dolphin or the closet planet depending on the camera mode

**Textures:**

flatGreen.jpg  
flatOrange.jpg  
flatRed.jpg

ceres.jpg  
eris.jpg  
haumea.jpg  
jupiter.jpg  
makemake.jpg  
mars.jpg  
mercury.jpg  
neptune.jpg  
saturn.jpg  
sun.jpg  
venus.jpg  
venusSurface.jpg

Dolphin\_HighPolyUV.png  
Earth-day.jpeg  
Hexagons.jpeg  
Moon.jpeg

**Meshes:**

Earth.obj  
dolphinHighPoly.obj

**Materials:**

default.mtl  
dolphin.mtl  
darth.mtl

**Skybox:**

stars.jpg

**Source/License:**

Created by me using Microsoft Paint

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Provide in RAGE

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