COMPUTER GRADE 6 – 9:00-9:40

Monday 10-21-2019

Topic: Game Design using Gamestar Mechanic – Lesson 1 – Terms and Concepts – Rotation E - Sepos

Objective: The students will be learning all about game design and how games are created. They will create accounts at <u>http://gamestarmechanic.com/join/ElementaryGD</u>. The teacher will explain how the game building site works and the students will play through the first Gamestar Mechanic quest, episodes 1 and 2. These episodes will help them understand the terms and concepts that are used in game design. They can play individually or in partners

Assignment: Work on Episodes 1 and 2.

Upcoming events: Game Design using Gamestar Mechanic – Lesson 2 – Core Design Elements

Tuesday 10-22-2019

Topic: Game Design using Gamestar Mechanic – Lesson 2 – Core Design Elements – Rotation A - Siege

Objective: The students will understand that games are systems and they must be familiar with the elements of a system. Students will explore a game system by editing the Change the Element template game. They will play through Episodes 3 and 4 of Gamestar Mechanic. They can login via the front page login now that their accounts have been created.

Assignment: Work on Episodes 3 and 4.

Upcoming events: Game Design using Gamestar Mechanic – Lesson 3 – Balance

Wednesday 10-23-2019

Topic: Game Design using Gamestar Mechanic – Lesson 3 – Balance – Rotation B - Strausser

Objective: For a game to be fun, it must also be challenging. In this lesson, students will balance the elements of a game in Gamestar Mechanic. The students will play through Episode 5. The last mission in Episode is a build mission. Here students have the opportunity to make a game for the first time. They will be encouraged to think about the concept of a balanced game as they create their first game.

Assignment: Work on Episode 5.

Upcoming events: Game Design using Gamestar Mechanic – Lesson 4 – Design

Thursday 10-24-2019 <u>Topic</u>: No Class Today – Rotation C

Objective: None

Assignment: None

Upcoming events: None

Friday 10-25-2019

Topic: Game Design using Gamestar Mechanic – Lesson 2 – Core Design Elements – Rotation D - Lasko

Objective: The students will understand that games are systems and they must be familiar with the elements of a system. Students will explore a game system by editing the Change the Element template game. They will play through Episodes 3 and 4 of Gamestar Mechanic. They can login via the front page login now that their accounts have been created.

Assignment: Work on Episodes 3 and 4.

Upcoming events: Game Design using Gamestar Mechanic – Lesson 3 – Balance

COMPUTER GRADE 3 – 9:45 – 10:25

Monday 10-21-2019 <u>Topic</u>: Google Docs – E Rotation – Glassman

Objective: The students will learn how to use the basics of the Google Documents program. They will work learn how to create, save, and close files. In addition, they will learn about font settings, selecting, zoom tools, cut, copy, paste, and changing the fonts, sizes and colors of text. Clipboard, highlighter, and style settings will be discussed. In addition, they will learn how to insert images, shapes, and clipart. They will work with printing features, borders and shading, and the spell checker feature.

Assignment: None

Upcoming events: Google Slides

Tuesday 10-22-2019

Topic: Google Docs Writing Prompt – A Rotation – Truby

<u>Objective</u>: The students will complete a 15-minute writing prompt based on the following: "If you were a witch or a warlock and could cast a spell, what would it be? Describe the steps in making the spell. What happens to the person if you cast the spell on them?"

Assignment: Submit Writing Prompt to our online classroom for grading.

Upcoming events: Google Slides

Wednesday 10-23-2019 <u>Topic</u>: No Class Today – B Rotation

Objective: None

Assignment: None

Upcoming events: None

Thursday 10-24-2019

Topic: Presentation Basics Using Google – C Rotation – Besic

Objective: The students will learn how to use the basics of the Google Presentation program. They will work with pre-made files and learn how to open, save, and close them. In addition, skills will include adding new slides, changing slide layouts, moving slides, using the slide sorter, changing color settings and themes, adjusting the page setup and changing the slide orientation.

Assignment: None

Upcoming events: Mystery Item Project

Friday 10-25-2019

Topic: Presentation Basics Using Google – D Rotation – DeAngelo

Objective: The students will learn how to use the basics of the Google Presentation program. They will work with pre-made files and learn how to open, save, and close them. In addition, skills will include adding new slides, changing slide layouts, moving slides, using the slide sorter, changing color settings and themes, adjusting the page setup and changing the slide orientation.

Assignment: None

Upcoming events: Mystery Item Project

CHS INTRO TO JAVA PROGRAMMING

Monday 10-21-2019

Topic: JAVA Fundamentals – 3.6 Comparing String Objects

Objective: The students will read Chapter 3 section 3.6. We will discuss using a String method to compare String objects and comparing String objects to String literals. The students will create a StringCompare.java program that compares String objects. We will compile and run the program several times using different data so the students can see the results. We will discuss using a String method to compare String objects by using the lexicographical comparison "compareTo" string method. The students will create a StringCompareTo.java program that compares String objects letter by letter. We will compile and run the program several times using different data so the students can see the results.

Assignment: None

Upcoming Events: Ignoring Case in String Comparisons

Tuesday 10-22-2019

Topic: JAVA Fundamentals – 3.6 Ignoring Case in String Comparisons

Objective: The students will continue to read Chapter 3 section 3.6. We will discuss using String method that ignore case when comparing String objects. The students will create a SecretWord.java program that compares String objects by ignoring case. We will compile and run the program several times using different data so the students can see the results. We will review variable declaration and scope by looking at the VariableScope.java program.

Assignment: None

Upcoming Events: The switch Statement

Wednesday 10-23-2019

Topic: JAVA Fundamentals – 3.6 Checkpoint Quiz

<u>Objective</u>: The students will complete the checkpoint quiz. They will not be allowed to use a compiler to find the answer. They must figure out the logic on paper and complete the Google form quiz.

Assignment: Mark the quiz as completed in our online classroom for grading.

Upcoming Events: The switch Statement

Thursday 10-24-2019

Topic: JAVA Fundamentals – 3.9 The switch Statement

Objective: The students will read Chapter 3 section 3.9. We will discuss using a switch statement to give one variable the possibility to branch to multiple statements based on the expression. The students will create a SwitchDemo.java program that uses a switch statement. We will compile and run the program several times using different data so the students can see the results. We will then take the *break* statements out of the program to see how it affects the results.

Assignment: None

Upcoming Events: Checkpoint problems

Friday 10-25-2019

Topic: JAVA Fundamentals – 3.9 The switch Statement

<u>Objective</u>: The students will continue to read Chapter 3 section 3.9. We will discuss the different switch statement options by importing the PetFoods.java program and the Seasons.java program. This will be the student's first time learning how to import a java

program into the Eclipse IDE. We will compile and run the two program several times using different data so the students can see the results.

Assignment: None

Upcoming Events: Checkpoint problems

BUILDING VIRTUAL WORLDS

Monday 10-21-2019 <u>Topic:</u> Virtual World Terrain Project

Objective: The students will continue to work on their virtual terrain.

Assignment: Work on Virtual Terrain project

Upcoming Events: Terrain Presentation

Tuesday 10-22-2019

Topic: Virtual World Terrain Project

Objective: The students will continue to work on their virtual terrain.

Assignment: Work on Virtual Terrain project

Upcoming Events: Terrain Presentation

Wednesday 10-23-2019

Topic: Virtual World Terrain Project

Objective: The students will continue to work on their virtual terrain.

Assignment: Work on Virtual Terrain project

Upcoming Events: Terrain Presentation

Thursday 10-24-2019

Topic: Virtual World Terrain Project

Objective: The students will continue to work on their virtual terrain.

Assignment: Work on Virtual Terrain project

Upcoming Events: Terrain Presentation

Topic: Virtual World Terrain Project

Objective: The students will continue to work on their virtual terrain.

Assignment: Work on Virtual Terrain project

Upcoming Events: Terrain Presentation

COMPUTER 7

Monday 10-21-2019 **Topic**: UFO Alien Rescue Game

Objective: In this step, the students will make the UFO move when the user presses the up and down arrow keys. Each time the user presses an arrow key this will create an event. An event is an action like a button push or mouse click. We can add code to listen for an event. When the event occurs that code will be executed (run). We will create a property to control how fast the UFO moves, called "speed". A property is an attribute or detail about an object. A property can also be called a variable, which is a named value, and that value can change or vary. We will use a conditional statement to execute code only if some condition is true. These are also called if statements. The UFO can move forwards and backwards, but if we want it to go in another direction, the students will need to tell it how to turn right and left. We will create a variable to hold the turn speed and add conditionals to check if the left or right arrow key has been pressed. A variable is a stored value for a name and that value can change or vary. A conditional executes code if some condition is true. This is also called an "if" statement.

Assignment: None

Upcoming Events: Adding People and Aliens to the Scene

Tuesday 10-22-2019

Topic: UFO Alien Rescue Game

Objective: Our scene has almost all of the objects it needs for the game - all that is missing are the people and aliens the UFO will pick up. The students will add these objects to the scene and customize them. They will also create the tractor beam that will be used to pick up the aliens in our game.

Assignment: None

Upcoming Events: Programming the Tractor Beam

Wednesday 10-23-2019

Topic: UFO Alien Rescue Game

Objective: In this step, we want to pick up the aliens when the tractor beam is over them and the player presses a button. The students will do this by creating a procedure for the alien class to check if the current alien object is in the beam. If it is, they will move the alien into the ship. A procedure is something an object knows how to do like move or turn. A class defines

the procedures and properties for all objects of that class. Procedures can take parameters, which define a piece of information that is passed to the procedure.

Assignment: None

Upcoming Events: Checking if You Have Won the Game

Thursday 10-24-2019

Topic: UFO Alien Rescue Game

Objective: In this step, the students will add a way to win the game. They can do this by repeatedly checking if the aliens are inside the ship; if all three are in the ship at the same time, you won! They will use a while loop to repeat a section of code while a condition is true. They will also add a Boolean variable, which can be either true or false to keep track of if they have won, or not. This time we will use a compound conditional, which is a conditional that has more than one part. An example of a compound conditional is: if my score is greater than five, and my health is greater than zero then I win the game

Assignment: None

Upcoming Events: More Things to Try and Add to the Game

Friday 10-25-2019

Topic: UFO Alien Rescue Game

<u>Objective</u>: The students will customize the Alien Rescue game on their own. They can choose from the following ideas:

- Make the characters move around the scene with a new procedure so it's harder to catch them
- Add sound effects to the game
- Display the score
- Add a timer which only gives the user so long to collect the aliens
- Making it so the player loses if s/he takes too long
- Add instructions for playing the game

Assignment: None

Upcoming Events: 3D Modeling