ORACLE ACADEMY

Lesson 12: Develop a Complete Animation

Try It: Practice Activities

Instructions:

Open the "WhiteRabbitProject" project you saved in the previous lesson. You will use this project for all of the practice activities listed below. Download this lesson's project file if you did not complete the previous lesson's Try It activities.

1. Define a scenario for a complete animation.
    1. Define a scenario for a rabbit and meadow scene animation that includes all concepts learned in this course.
    2. Plan to include all of the following features in your animation:
        1. Complete scene of multiple objects from multiple classes, including props and shapes
        2. Declared procedures
        3. Movement procedures
        4. Object rotation and object subpart rotation procedures
        5. Simultaneous movement with the Do Together control statement
        6. Vehicle riding with the setVehicle procedure
        7. Functions
        8. IF and WHILE control statements
        9. Random numbers
        10. Math expressions
        11. Variables
        12. Keyboard controls
2. Design a storyboard for a complete animation.
    1. Create a storyboard for a rabbit and meadow scene animation that includes all concepts learned in this course. Use the scenario you created in the previous activity to help develop your storyboard.
3. Program a complete animation.
    1. Optional: Open the "WhiteRabbitProject" project file. You can start from this project or start a new project from scratch.
    2. Program a complete for a rabbit and meadow scene animation that includes all concepts learned in this course.
    3. Use the scenario and storyboard you created in the previous activity.
    4. Review the checklist for animation completion below. Use this checklist to ensure your animation is complete.
    5. Save the project.
4. Test and debug a complete animation.
    1. Test, edit, and debug the complete White Rabbit animation project.
    2. Add programming comments to each section of code in the code editor.
    3. Save the project.
5. Reposition objects at runtime.
    1. Add the addDefaultModelManipulation procedure into the initializeEventListeners code editor.
        1. Test the animation, repositioning objects at runtime.
        2. Save the project.
6. Present a complete animation.

1. On your own or with your project group, plan, practice and deliver a presentation of your complete Alice 3 animation. Show all aspects of your animation and show how each concept learned in this course was used in your complete Alice 3 animation project.

Checklist for Animation Completion

Area	Check	✓
Scenario	Did you clearly define the scenario?	
Storyboard	Did you think through the animation by creating a storyboard?	
Program	Did you complete the programming of the animation?	
Scene	Has the scene been created?	
Object orientation	Are all objects positioned accurately in the scene?	
Procedures	Did you assign procedures to all acting objects?	
Arguments	Have all arguments (direction, amount and duration) been assigned and are they operating as expected?	
Control statements	Did you assign control statements and are they operating as expected?	
Comments	Have you added comments to each sequence of instructions?	
Object timing	Do objects move with smooth timing, or are they too fast or too slow?	
Object motion	Do acting objects motions (move, turns, rolls, etc.) operate as expected?	
Math calculations	Are all math calculations operating as expected?	
Event listeners	Are all event listeners operating as expected?	
Test	Did you test the animation and fix all errors (if necessary)?	

Save	Has the animation been saved? Do you require multiple saved files (i.e., will the animation be used for another animation?)	