**ICS4U – Project 4 – Falling Squirrels Name:**

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|  | **Level 4** | **Level 3** | **Level 2** | **Level 1** | **R** |
| **Overall Functionality** | Program functions exactly as designed, with further enhancements. | Program functions exactly as designed. | Program functions as designed, with minor bugs. | Program functions as designed, with major bugs. | Program does nothing. |
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| **Panel** | Panel is used effectively to hold animation. | Panel is used effectively to hold animation. | Panel is used ineffectively to hold animation. | Panel is not used to hold animation. | No evidence of panels. |
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| **Buttons** | User can use buttons to select difficulty level between 1 and 10.  Start button initializes a new game.  Stop button stops and resets game. | User can use buttons to select difficulty level between 1 and 10 with most cases functioning properly.  Start button initializes a new game.  Stop button stops and resets game. | User can use buttons to select difficulty level between 1 and 10 with some cases functioning properly.  Start and stop buttons do not start and reset games properly. | User can use buttons to select difficulty level between 1 and 10 with few cases functioning properly.  Start and stop buttons do not start and reset games properly. | No evidence of buttons. |
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| **Farmer** | Farmer can be moved along bottom border using left and right mouseclicks AND the right and left arrows on the number keypad.  Farmer stops when he hits the right & left border of the panel. | Farmer can be moved along bottom border using left and right mouseclicks OR the right and left arrows on the number keypad.  Farmer stops when he hits the right & left border of the panel. | Farmer can be moved along bottom border using left and right mouseclicks OR the right and left arrows on the number keypad.  Farmer does not stop when  he hits the right & left border of the panel. | Farmer can be moved along bottom border using left and right mouseclicks OR the right and left arrows on the number keypad with some irregularity.  Farmer does not stop when  he hits the right & left border of the panel. | No evidence of movement control. |
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| **Eagles & Squirrel** | Eagle is placed in a random horizontal position when the squirrel is caught, or when the squirrel hits the ground.  The squirrel’s speed depends on the difficulty level set. | Eagle is placed in a random horizontal position when the squirrel is caught, or when the squirrel hits the ground.  The squirrel’s speed usually corresponds to the difficulty level set. | Eagle is placed in a random horizontal position but occasionally at the wrong time.  The squirrel’s speed sometimes corresponds to the difficulty level set. | Eagle is placed in a random horizontal position at the wrong times.  The squirrel’s speed rarely corresponds to the difficulty level set. | No evidence of movement of eagle or squirrel. |
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| **Timer** | Timer display accurately shows user how much time is remaining in the game. |  | Timer display inaccurately shows user how much time is remaining in the game. |  | No evidence of timer display for user. |
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| **Score** | Score increases when squirrel is caught by farmer. |  | Score increases with errors when squirrel is caught by farmer. |  | No evidence of score display. |
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| **Code** | Code is as efficient and organized as possible. | Code is efficient and occasionally disorganized. | Code is inefficient and occasionally disorganized. | Code is inefficient and disorganized. | No evidence of code. |
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| **Comments** | Code has thorough comments indicating the role of every component, making it easy for an outsider to read and understand. | Code has comments indicating the role of most of the components, making it easy for an outsider to read and understand. | Code has some comments indicating the role of a few of the components, making it easier for an outsider to read and understand. | Code has minor comments indicating the role of a few of the components. | No evidence of comments. |

**Overall Mark:**