**Test Plan**

| **Game Action to be Tested** | **Test Method** | **Expected Outcome** |
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| Textured Geometry (Draw Order) | Set the result of a blendy-minion collision to be nothing, and check the layer order of blendy and the minion. | The minion should overlap Blendy, showing that the draw order is correct. |
| Basic 2D Transformations | Inside WordInit.cpp, set the scale position and angle and observe if Entity is affected in the desired fashion. | The entity can be translated, rotated, and scaled. |
| Two smooth interpolation | Load game and check color of the background and minions | Both the background and the minions should smoothly transition colors from red to blue depending on their x coordinate (red on the left, blue on the right). |
| Keyboard or mouse control | Depression of left key, down key, right key, and up key on the keyboard. | Blendy should move left, down, right, and up on the screen in correlation to depression of the corresponding key. |
| Randomized/Hard-coded action of entity | Check if the minions are falling from the top of the screen when the game plays. | Minions should continue to fall. |
| Define and enforce the boundaries | Check by making the player walk over to the left, right, top, and bottom boundary. Check if the player passes these boundaries. | The player should be unable to move beyond the boundaries and should remain entirely in the viewport. |
| Collision resolution | Have blendy run into minions (bounding boxes overlap). | Blendy should die after colliding with minions. |
| Stable framerate and minimal game lag | Increase the max-minions and reduce minion spawn time in order to fill the screen with minions. | Game should continue without frame rate changing or game lag. |
| No crashes, glitches, or unpredictable behaviour | Move Blendy around the game, testing all above behaviors. | Blendy should react correctly to all blenders, with no instances of jitter, crashes, lags, or unexpected events. |
| Check Blinn-Phong Illumination | Move the light source using the j , k, l, and i keys. | Blinn-Phong lighting should change accordingly, with the minions and blendy acquiring diffused specular and ambient lighting. Background should receive similar lighting. |