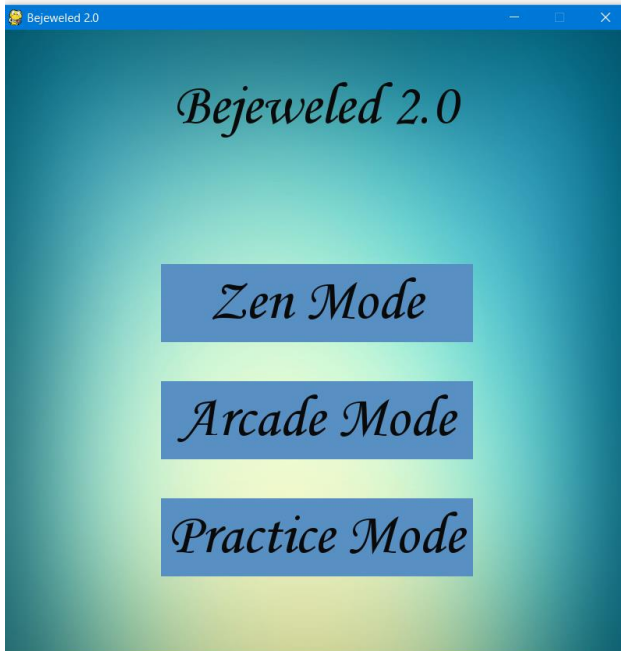


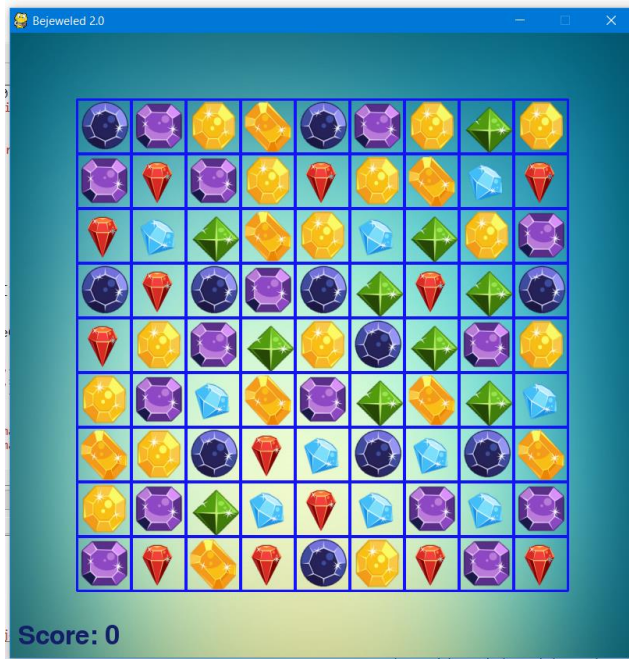
Manual Test Plan

Game Modes:

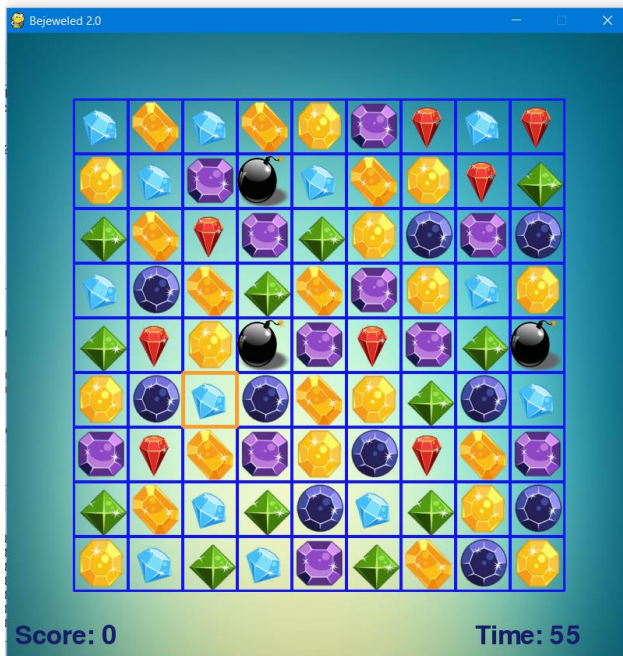
1. Run game.py, it will start up a pygame window like below. Pick any mode to continue.



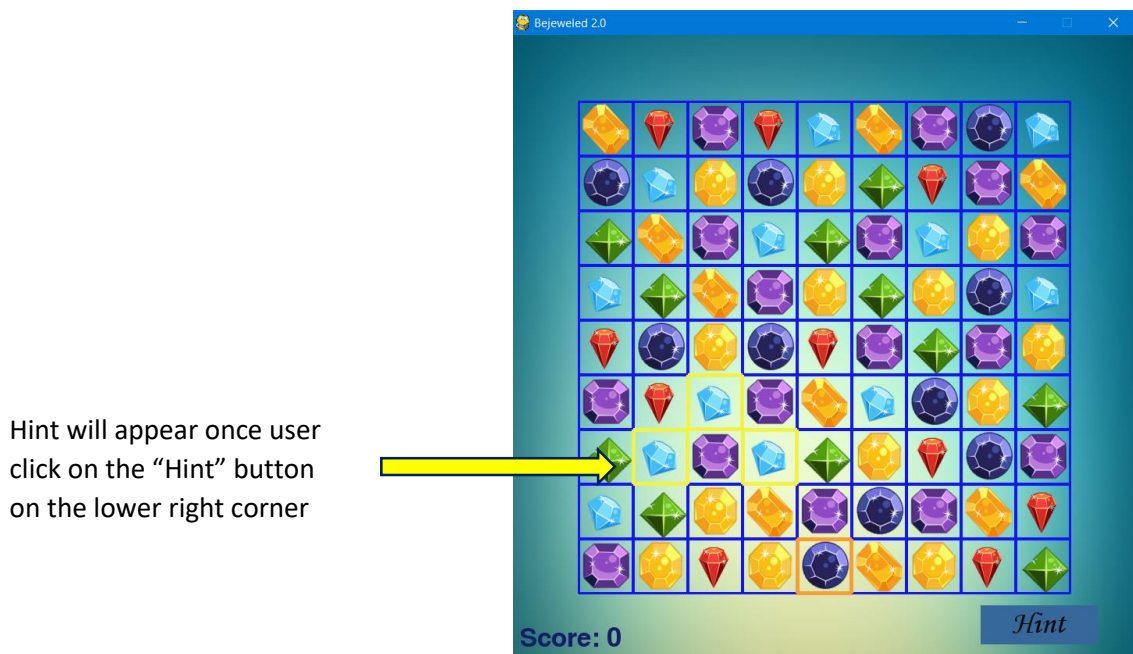
2. **Zen Mode:** No time limit, player can play it until whenever they want.



Arcade Mode: Timed game, with “super mode” and “bombs” included in the game.



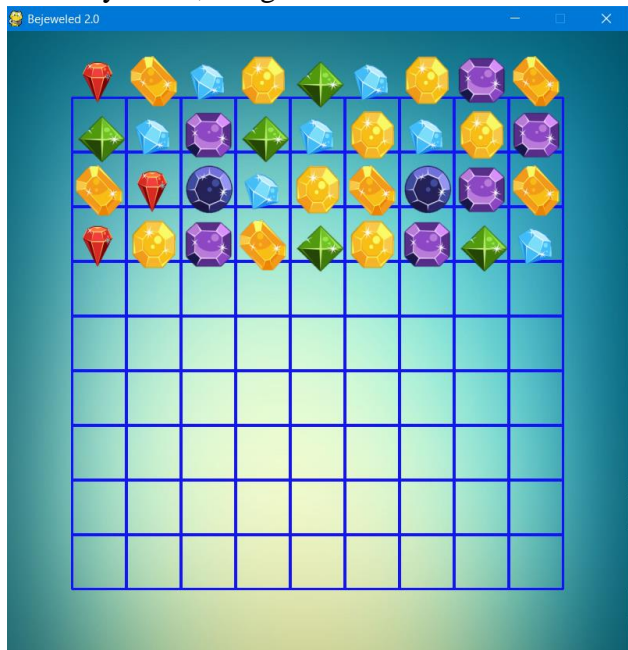
Practice Mode: No time limit. There's a “Hint” button, a hint will appear when user click on it.



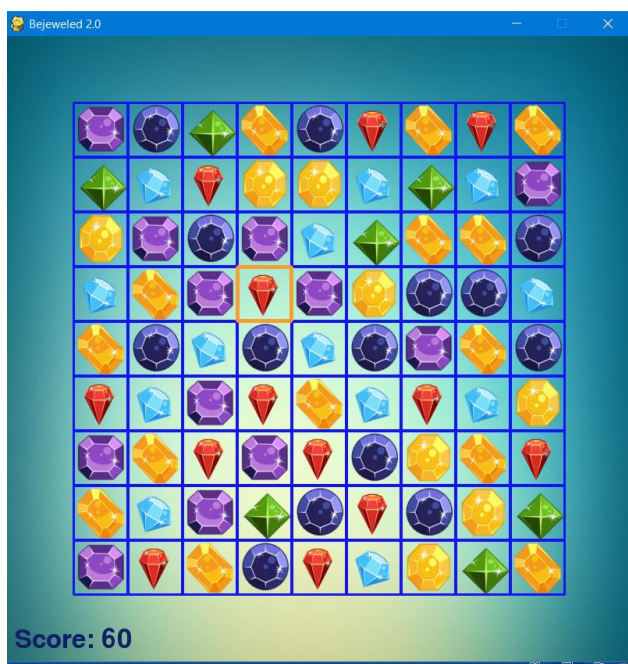
Hint will appear once user click on the “Hint” button on the lower right corner

Game Functions:

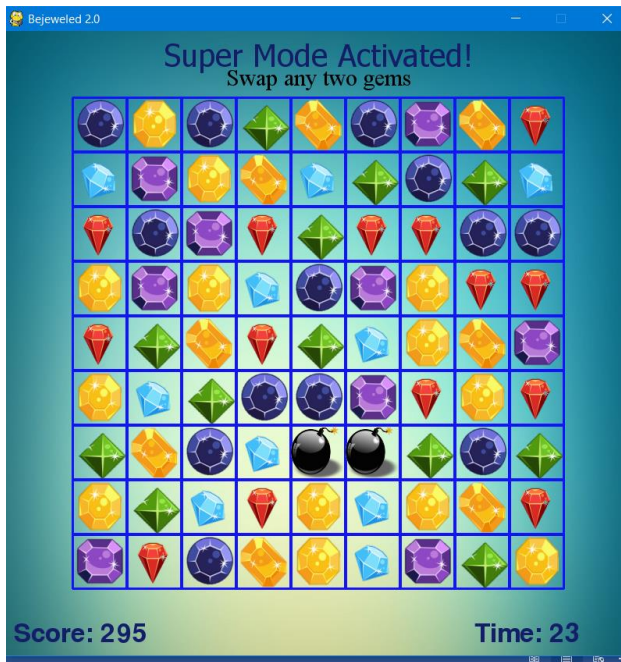
1. Pick any mode, the game will start with animation of gems dropping down.



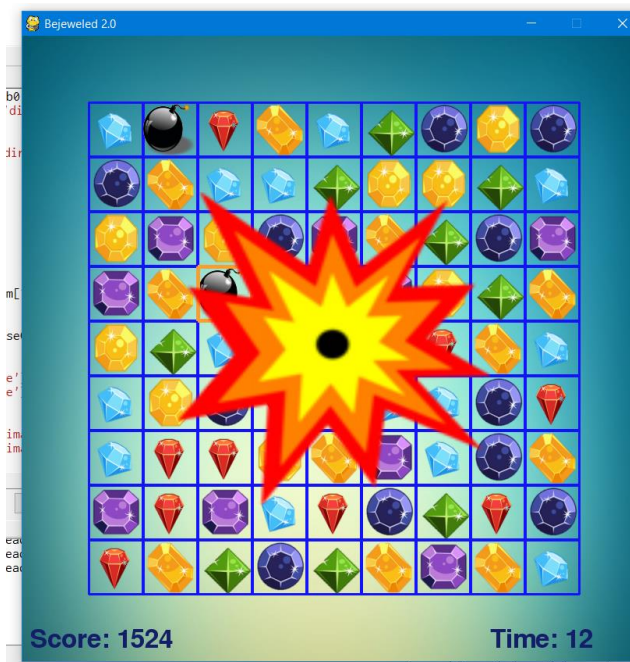
2. Click the first gem, it will highlight the square as shown below. Swap it with any gems in the four directions of the clicked gem. If the second clicked gem is not swappable with the first one, the highlight will disappear. Click any two gems to swap to create a link of three or more identical gems, the link will then disappear.



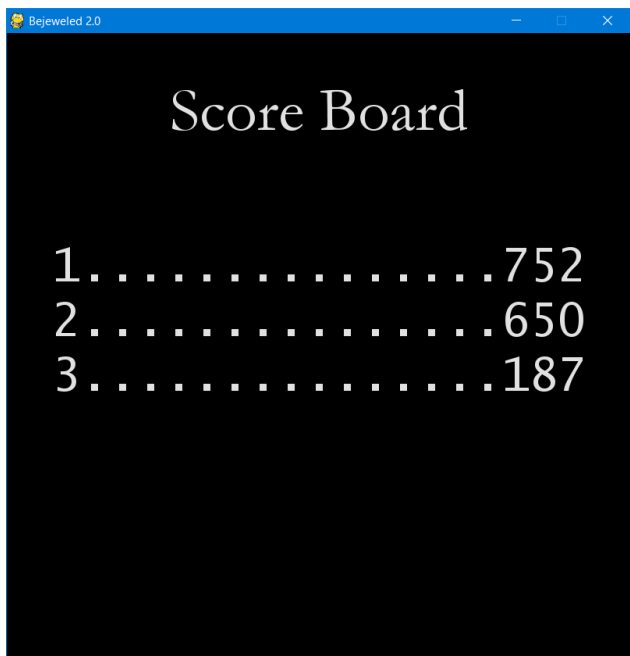
3. Score is updated according to the length of the link and how much time has left. Chain of 4 or more will automatically add 10 secs to the time.
Ex: chain of 3, 56 sec remained = $(3 * 10) * (1 + 56/100)$
4. Super mode: When user reaches score of 800, the game enters into super mode where user can swap any two gems on the board to create links. Super mode ended when score exceeds 1500.



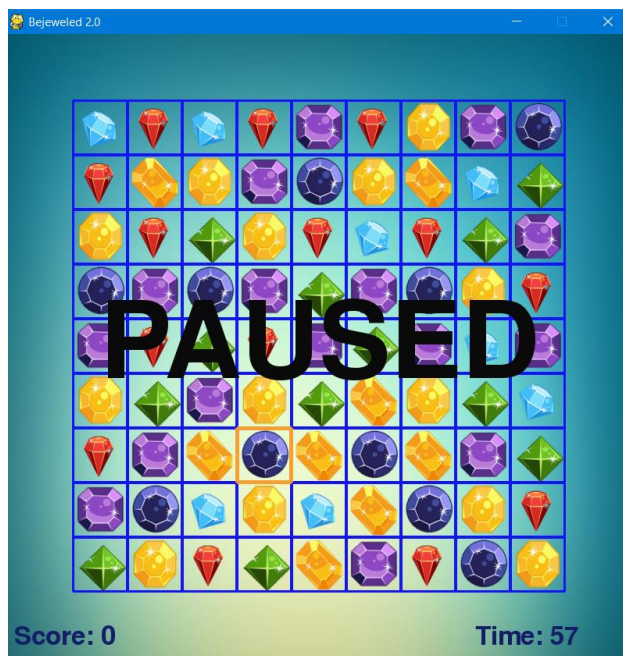
5. Bomb: Bombs are randomly distributed throughout the game. User can select bomb with any gems near it. An explosion sign will appear and clear the whole row or the whole column depends on user's choice.



6. Scoreboard: At the end of each game, a scoreboard will appear to show the ranking of the current session.



7. Press 'p' to pause the game, timer will stop.



8. Press 's' to resume.
9. Press 'r' to go back to menu.
10. Press 'esc' to exit the game.