

DASS Assignment 3

New Features

Sequence Diagram:

https://gitlab.com/Blizzard57/bowling-game/-/blob/dev-shreeya/Diagrams/UML_Seq_Dgm/

Class Diagram:

https://gitlab.com/Blizzard57/bowling-game/-/tree/dev-shreeya/Diagrams/UML_Class_Dgm/New_Features

New Features:

Feature	Description
Multi Playability	<p>Multi Playability allows having many (> 6) concurrent players in the game.</p> <p>This feature was partially implemented in the source code, and to complete it, minor changes were made.</p>
Score Record Database	<p>A score records database allows a user to search for the all-time best scores, and more queries like top players.</p> <p>For this a text file is maintained in the source folder. This houses all the scores of all the users in a different format.</p> <p>In this format, the first entry is the name, subsequent comma separated entries are the scores (latest at the least significant position). After that there is a semicolon separating the different users.</p> <p>For the implementation of such, first the complete file is initially dumped to a string, which is then split by semicolon first and then by comma. After that the respective data is found, added and the new string is dumped back to the file.</p> <p>This is useful while accessing the data, where the recent five and</p>

	other queries can be easily implemented.
Pause and Resume	<p>The feature temporarily freezes the complete functionality of the Lane it has frozen, not allowing any future changes to it, until the user resumes the game. This is a precursor to the save game, where a similar functionality was to be used.</p> <p>This feature required implementation of a new button to be added to the Lane Status Panel. This function mimics the functionality of the Maintain() call, but has a hierarchy built to it. When the game is paused, even maintenance cannot be done, so pressing those buttons should do nothing till the game is resumed. Also for good measure, the button is colored to always know if the game is paused or not.</p>