Individual Pitch:

Team Member: Nicolas Rodriguez:

One-liner: As a backend developer for the project, I will be implementing the GameSaveHandling and Jsonable interface for various GameElement Classes.

Outline: To persist game states and data, I will be implementing the GameSaveHandling feature which includes implementing the Jsonable interface for various GameElement Classes. This feature will involve converting the objects to and from Json format with the assistance of the Json library in PApplet.

Technical Details: I will be implementing the toJson and fromJson methods for the following classes: Paddle, PowerUp, Ball, Slab, Wall, Layout, Button, Textbox, and ScoreBox. This will involve working with the JSONObject and JSONArray library to convert the objects to a Json format and back. I will also ensure that the data is written and read correctly to/from files using the standard Java file I/O operations in the GameSaveHandler class.

Impact: The GameSaveHandling feature will allow the game to save and load levels. Additionally, implementing the Jsonable interface for the GameElement classes will improve the game's data persistence and readability, making it easier to maintain and debug.

Timeline: I estimate that the implementation of GameSaveHandling and the Jsonable interface will take around one month to complete. I will aim to have a working implementation by the first milestone and make any necessary adjustments during the subsequent milestones.

Risks and Mitigations: One potential risk is that the implementation may not work as intended, resulting in incorrect or missing data. To mitigate this risk, I will test the implementation thoroughly and ensure that the data is being read and written correctly. In case of any issues, I will collaborate with the other team members to find a solution.

References: I will use the official Processing.org documentation for the JSONObject and JSONArray library, and standard Java file I/O operations as references for implementing the GameSaveHandling feature and Jsonable interface.