Group members:

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The **Snake and Ladder** game package is a fun, interactive implementation of the classic board game, allowing two players to race to the 100th square while navigating snakes and ladders. With modular components, the package is well-suited for customization and scalability. Here's an overview of its structure:

- **board/display.py**: Responsible for rendering the game board using emojis. Players see an intuitive 10x10 grid with snakes (🐍), ladders (🪜), empty spaces (⬜), and player positions (🔵 for Player 1 and 🟡 for Player 2). It ensures clear visual tracking of gameplay.
- **board/board_setup.py**: Handles the initial setup of the board, placing snakes and ladders at predefined or randomized positions. This module ensures flexibility for different game configurations.
- **game/play_game.py**: The core module that drives gameplay. It manages player turns, dice rolls, position updates, and interactions with snakes and ladders. Players can quit at any time by typing 'q'. The game announces the winner when a player reaches the 100th square.
- **players/player_setup.py**: Manages player initialization, including starting positions and progress tracking. The module supports scalability for adding more players in future versions.
- **snakes_ladders/check_interaction.py**: Implements logic for interactions with snakes and ladders. Landing on a snake sends a player back to its tail, while landing on a ladder advances them to its top. This module ensures the unpredictability and excitement of the game.
- **utilities/roll_dice.py**: Simulates dice rolls by generating a random number between 1 and 6, determining how far a player moves.
- **utilities/print_ascii.py**: Enhances the visual appeal with ASCII art for banners, welcome messages, or game-over screens. It adds charm and creativity to the gaming experience.

- **test/**: Contains test cases to validate the functionality of all modules, including board rendering, dice rolls, player progression, and interaction logic. Leveraging unittest or pytest, this directory ensures the package is reliable and free from bugs.
- **requirements.txt**: Lists all the dependencies required to run the package. It simplifies the setup process by allowing users to install all necessary libraries using a single command (pip install -r requirements.txt).
- **README.md**: Provides comprehensive documentation about the package, including its purpose, features, installation instructions, usage guide, and examples. It serves as the primary reference for users and contributors, making it easier to understand and use the package effectively.

This package offers a seamless, engaging gameplay experience with a user-friendly interface. Players roll the dice, track their progress on the visual board, and navigate the fun unpredictability of snakes and ladders. Its modular architecture supports easy customization, from changing board dimensions to adding new gameplay features. The test suite ensures reliability, while the README.md and requirements.txt streamline installation and usage for both players and developers.