CRC Card for TeamMaker Class:

Team Name: (F4)

Class: TeamMaker

Class Description: The `TeamMaker` class is the central component of the "Optimized Team Maker" project. It orchestrates the creation of well-balanced and effective teams by analyzing the skills and expertise of individuals, ensuring optimal collaboration for project success.

Associated Use Cases:

Create Team: Initiating the process of creating a new team for a specific project or task. Involves defining team requirements and goals.

Join Team: Allowing individuals to join existing teams based on their skills and the team's requirements. Involves matching individual skills with team needs.

Browse Teams: Enabling users to explore existing teams and their compositions. Provides insights into team members and their expertise.

View Team Details: Providing detailed information about a specific team, including its members, their skills, and project history.

Generate Teams: Automatically generating optimized teams for a given project. Utilizes algorithms to ensure a balanced distribution of skills and expertise.

User Authentication: Ensuring secure access to the "Optimized Team Maker" system. Involves validating user credentials and managing user sessions.

Responsibilities:

Analyze Skills: The `TeamMaker` class is responsible for assessing the skills and expertise of individuals based on predefined criteria.

Match Individuals: Matching individuals to form teams based on their skills, experience, and the specific requirements of a project.

Generate Optimized Teams: Employing algorithms to automatically generate teams that are well-balanced in terms of skills, fostering effective collaboration.

Manage Teams: Handling operations related to team creation, modification, and disbandment. This includes updating team compositions and tracking project progress.

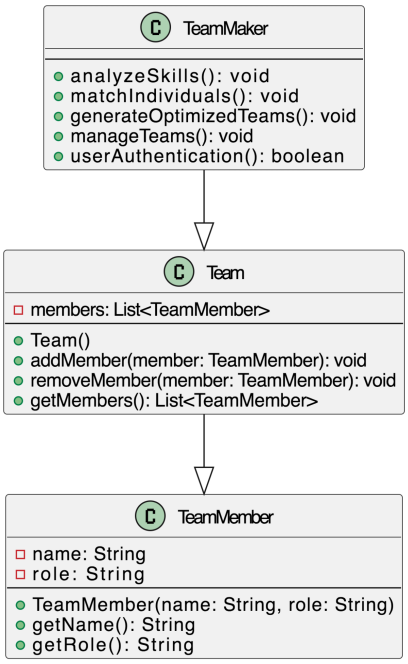
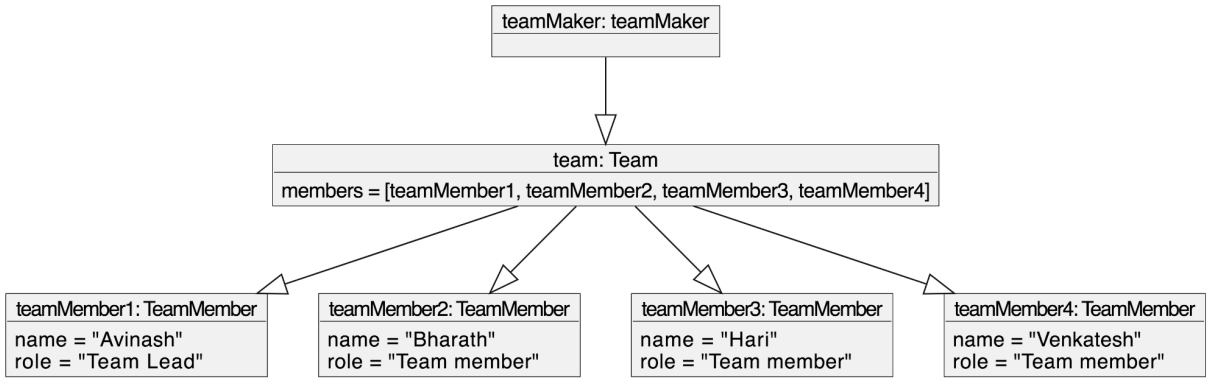
User Authentication: Ensuring secure access to the "Optimized Team Maker" system by authenticating users through secure login mechanisms.

Collaborators:

Team: Collaborating with the `Team` class to manage the composition and details of teams. Involves adding/removing team members and updating team information.

User: Collaborating with the `User` class for user authentication and interaction. Involves validating user credentials and managing user profiles.

CLASS DIAGRAM:



OBJECT DIAGRAM: