**ASSIGNMENT- 1**

**Create HLD document for a game application - Valorant with 5 features .**

**Introduction:**

Valorant is a game application that offers intense tactical shooting experience where players compete in teams to eliminate opponents. This document explains the key features and how they work in simple terms.

**1. Player Accounts:**

* **What it does**: Allows players to create accounts, log in securely, and manage their profiles.
* **How it works**:
  + **Sign-up/Login**: Players can create new accounts or log in with existing ones using a username and password.
  + **Profile Management**: Players can customize their profiles, check game stats as well as configure graphics and controls.
  + **Social Login**: Players can also sign up or log in using their social media accounts like Facebook or Google.

**2. Matchmaking and Game Lobby:**

* **What it does**: Allows players to find matches, create teams, and prepare for ranked/unranked matches.
* **How it works**:
  + **Matchmaking**: The game system pairs players together based on their ranks, region, and game mode preferences.
  + **Lobby Management**: Players gather in a virtual lobby where they can chat, form teams, and invite friends.
  + **Team Formation**: Players can join teams or create their own teams with friends to compete together.

**3. Gameplay Mechanics:**

* **What it does**: Provides immersive gameplay with character selection, weapon usage, and tactical abilities.
* **How it works**:
  + **Character Selection**: Players can choose from a variety of characters, each with unique abilities and playstyles.
  + **Weapon Usage**: Players can wield different weapons such as rifles, pistols, and shotguns, each with its own strengths and weaknesses.
  + **Tactical Abilities**: Characters have special abilities that can be used strategically during battles, such as healing, throwing grenades, or deploying shields.

**4. In-Game Economy and Purchases:**

* **What it does**: Allows in-game currency and items for customization or gameplay advantages.
* **How it works**:
  + **Virtual Currency**: Players earn in-game currency by participating in matches or completing objectives, which can be used to purchase weapons, upgrades, or cosmetic items.
  + **Item Shop**: There's a virtual store where players can browse and purchase various items, cosmetics, and weapon skins to personalize their characters.

**5. Objectives and Team-based Gameplay:**

* **What it does**: Emphasizes teamwork and strategy to complete objectives and win matches.
* **How it works**:
* **Objective-based Gameplay**: Players work together in teams to achieve specific objectives, such as planting or defusing bombs, or capturing points
* **Communication**: Players can communicate with their teammates through voice chat or text chat to coordinate their actions and strategies.
* **Team Roles**: Each player may have a specific role within the team, such as entry fragger, support, or sniper, to complement their teammates' abilities and tactics.

**Conclusion:**

Valorant aims to provide an easy-to-understand and intense gaming experience for players who enjoy tactical shooter games. With features like player accounts, matchmaking, gameplay mechanics, in-game purchases, and team-based objectives, players can immerse themselves in intense battles and strategic gameplay.