Activision

Activision is an American based Video game Publisher based in Santa Monica, Florida.

The company was founded as Activision, Inc on October 1, 1979. Activision was the first independent, third-party console video game developer. After a management shift, the company was renamed to Mediagenic and branched into business software applications. Mediagenic quickly fell into debt and was bought and acquired for $500,000 by Bobby Kotick and other investors.

Kotick drastically revamped and restructured the company in attempt to get out of debt, moving the company to Los Angeles and reverting the mediagenic name back to Activision, whilst building on existing assets Activision pursued more opportunities and, after recovering from its former financial debts started acquiring numerous studios and various types of intellectual properties over the 1990s and 2000s, among these being Call Of Duty and Guitar Hero series. Following a Holding company was formed as Activision's parent company to manage both its internal and acquired studios. In 2008 this holding company merged with vivendi Games and formed what is known now as Activision Blizzard, with Kotick as its CEO. Within this structure, Activision manages numerous third-party studios and publishes all games besides those created by Blizzard. In October 2023, Microsoft acquired the parent company Activision Blizzard, maintaining that the company would continue to operate as a separate business. While part of a larger Microsoft gaming division. Activision retains its function as the publisher of games developed by their studios.

Activision (2025) *Wikipedia*. Available at: https://en.wikipedia.org/wiki/Activision

Matchmaking

In the context of this case project focus we will be dealing with the matchmaking in the popular game named “Call Of Duty”.

Call of Duty matchmaking Is a complex and a multifaceted domain, for a player to connect to a lobby they must undergo a selection of process and skill is just one factor in the multidimensional algorithm of Call Of Duty matchmaking. The other factors include.

- Connection:

Connection to the server is the most critical and heavily weighted factor in the matchmaking process

- Time to Match:

This factor is the second most critical to the matchmaking process

- Skill/Performance:

This is used to give players or The global community with a varying range of skills the opportunity to have an impact in every match. This process is critical to the impact of all our matches.

- Platform:

This is the device the player is currently playing on.

- Voice Chat:

Enabled / Disabled.

- Input Device:

Controller / Mouse & Keyboard

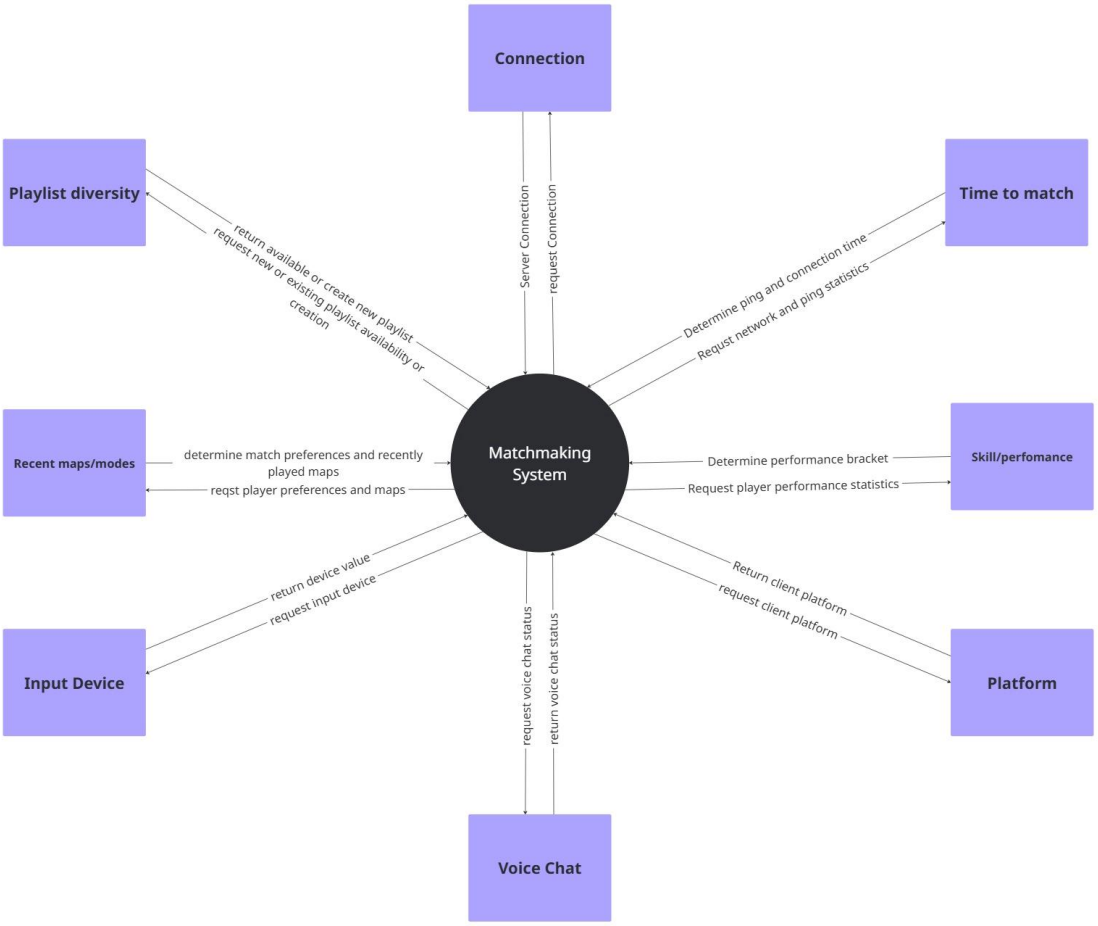
- Recent maps/Modes:

Considering recent maps and modes you have played on considering your current preference of modes editable in the quick play menu.

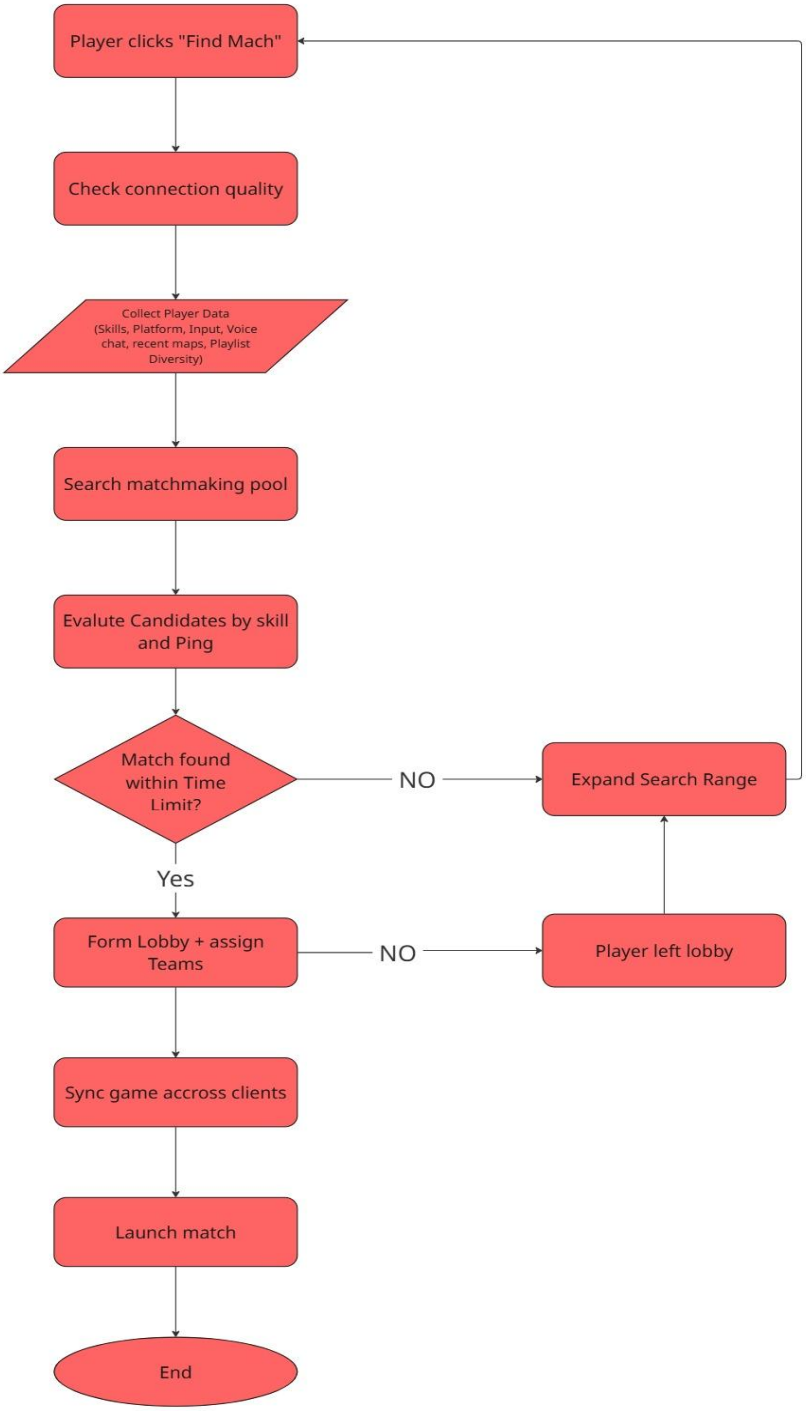
- Playlist Diversity:

The number of playlist available for the player to choose from

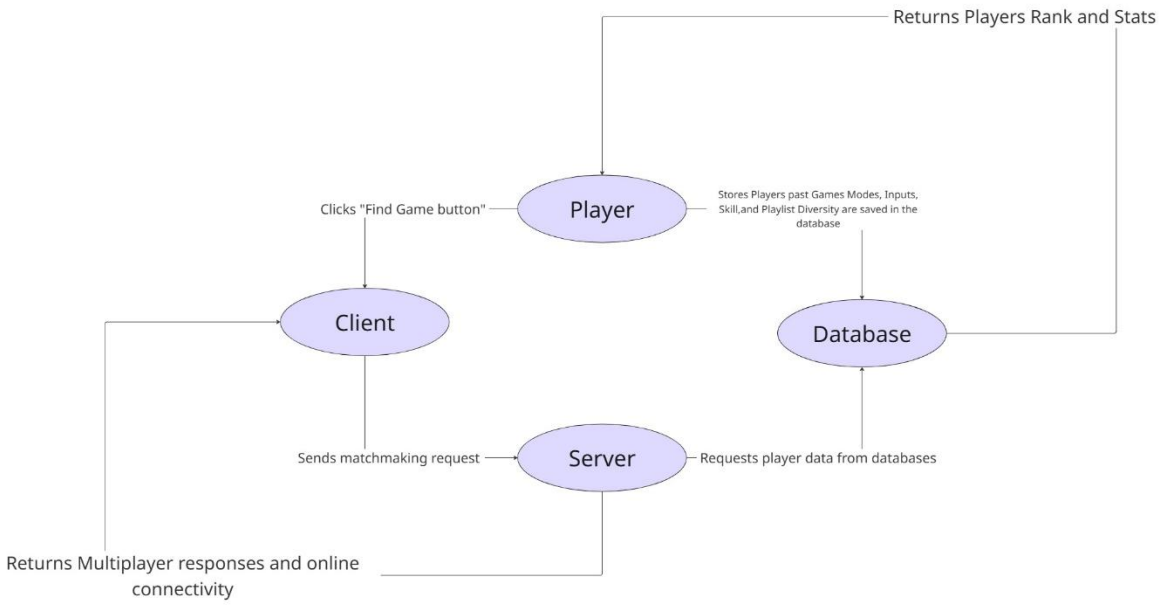
This context diagram shows the entire all the elements that factor into creating a diverse matchmaking system.



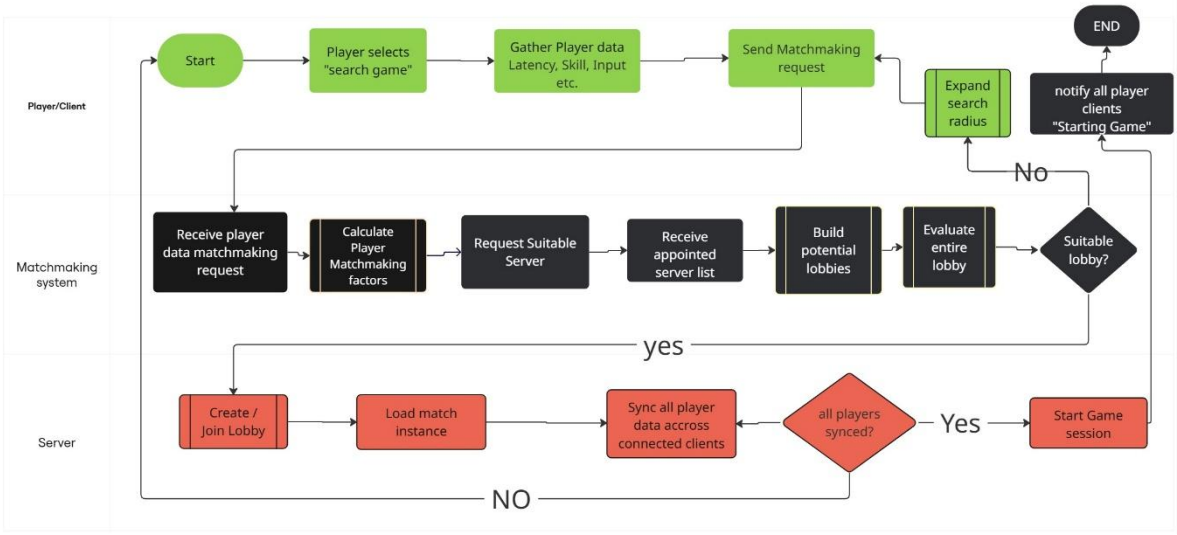
This is a flow chart which show basic processes that take place before a match can start.


Player clicks "Find Mach"
Check connection quality
Collect Player Data (Skills, Platform, Input, Voice chat, recent maps, Playlist Diversity)
Search matchmaking pool
Evalute Candidates by skill and Ping
Match found within Time Limit?
NO
Expand Search Range
Yes
Form Lobby + assign Teams
NO
Player left lobby
Sync game accross clients
Launch match
End

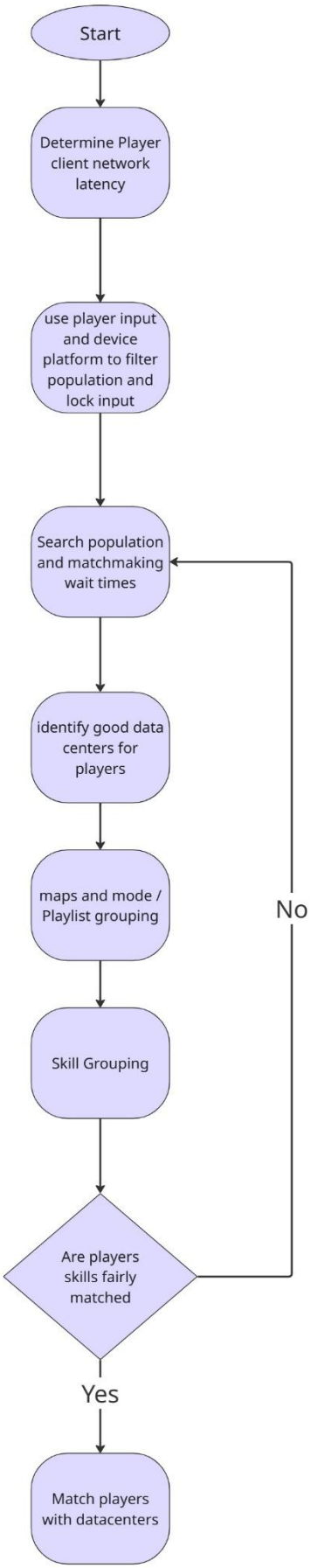
This is a Functional Flow diagram which shows how the player client connects to databases and servers



This is a Cross Functional Flow Diagram using swim lanes to show the events performed by the player and one action stems and interacts with the entire matchmaking process.



This is a Flow chart diagram of how the matchmaking subprocess in my functional flow diagram contributes to the entire system.


Start
Determine Player client network latency
use player input and device platform to filter population and lock input
Search population and matchmaking wait times
identify good data centers for players
maps and mode / Playlist grouping
Skill Grouping
Are players skills fairly matched
No
Yes
Match players with datacenters

Thank you for your time I really enjoyed making a project like no other especially in a topic I'm interested in!

1 © 2024 Activision Publishing, inc. matchmaking series: Ping. Insider on Matchmaking. https://research.activision.com/content/dam/atvi/activision/atvi-touchui/research/publications/docs/Call-of-Duty-Matchmaking-Series-PING.pdf

2 © 2024 Activision Publishing, inc. matchmaking series:(n.d.)

https://www.activision.com/cdn/research/CallofDuty_Matchmaking_Series_2.pdf

3 @ Activision (2025) *Wikipedia*. Available at: https://en.wikipedia.org/wiki/Activision