

# PES INNOVATION LAB

## Team: What's Grass ?

Shreyas Battula

Shashank Varma

Shrujan

Shishira Bhat



# INSPIRATION



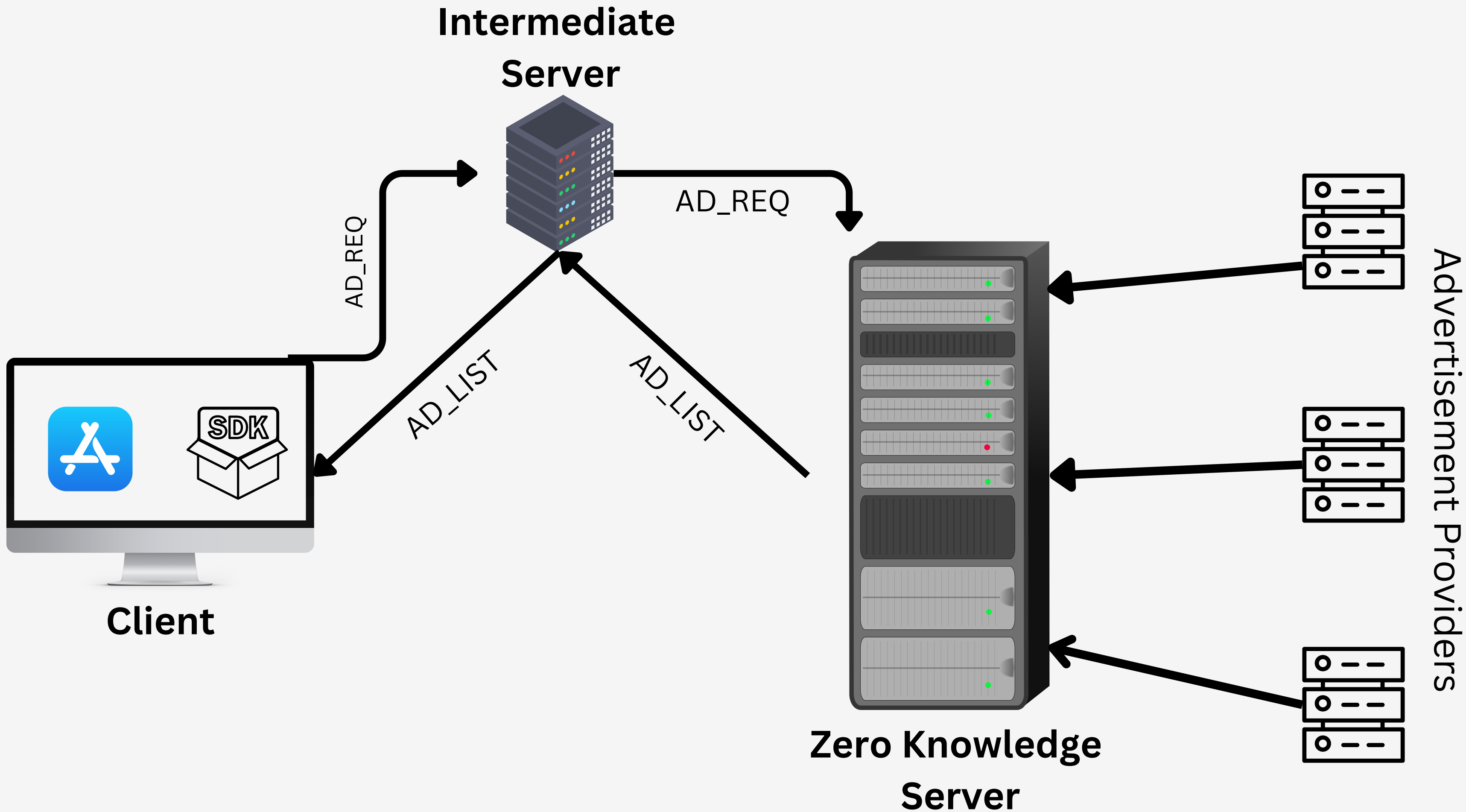
- With the increase in the number of users on the internet the concern for protecting the privacy of the users also grows.
- This is mainly due to the fact that data-centred companies use your personal information to sell you their products and services.
- Here are some stats for the same The amount of data we produce every day is truly mind-boggling. There are 2.5 quintillion bytes of data created each day at our current pace.

# SOLUTION

A privacy protecting, targeted  
Advertising service

# Implementation

- The Architecture has been implemented in such a way that the user's data never leaves our system.
- It consists of 2 servers:
  - A Zero Knowledge Advertising server  
An intermediate server simulating a VPN or a P2P Network
- A content based recommendation model to recommend the most relevant ads



# Deployment

- Advertising Clients connect to Zero Knowledge servers Provide the Ad Data and also Pay for the service
- The Ads are communicated to the Task Server which is ideally a Peer - to -Peer network to safeguard the User privacy

# Novelties

- 1 Complete abstraction of user privacy.
- 2.Relevant advertisements to individual users.
- 3.Minimum footprint
- 4.Click analytics
- 5.P2P enhances privacy:Scalability

# Business Model

**PRODUCT:**Our product uses state-of-the-art architecture to arrest user details within the application and the SDK and recommends targeted ads to every user.

## Why Invest in this Technology?

Having a privacy-protected targeted advertisement would be one of the technologies that would grow in the coming years as people become more concerned with their privacy.

The advertising companies **pay for the advertisement** they would want to advertise and the **applications are paid by us** for providing us with the **ad space**.



# Output

```
Enter your Choice
1.Get Recommendation
2.Exit
Choice : 1
Enter Movie name : Superman
['Superman II', 'Superman IV: The Quest for Peace', 'Superman Returns', 'Man of Steel', 'Superman III', 'Batman v Superman: Dawn of Justice', 'The Mummy: Tomb of the Dragon Emperor', 'The Monkey King 2', 'Indiana Jones and the Kingdom of the Crystal Skull', 'The Sorcerer's Apprentice']
Matadata Recieved
Matched movie : Superman Returns
Matched movie : Man of Steel
Matched movie : Superman III

Matched Movies

Superman Returns : http://www.superman.com
Man of Steel : http://www.manofsteel.com/
Superman III : http://thisisamovie.com/
```

```
1 2023-03-26 06:28:57,296 Connection added on taskZKA server
2 2023-03-26 06:28:57,301 Connection established with ZKA server
3 2023-03-26 06:28:57,788 Opened Selected List File to write into
4 2023-03-26 06:28:58,043 Sent Ad list to server
5 2023-03-26 06:28:58,044 Connection closed with ZKA server
6 2023-03-26 06:29:40,342 Connection added on taskZKA server
7 2023-03-26 06:29:40,345 Connection established with ZKA server
8 2023-03-26 06:29:40,857 Opened Selected List File to write into
9 2023-03-26 06:29:41,166 Sent Ad list to server
10 2023-03-26 06:29:41,167 Connection closed with ZKA server
11 2023-03-26 06:29:49,940 Connection added on taskZKA server
12 2023-03-26 06:29:49,942 Connection established with ZKA server
13 2023-03-26 06:29:50,470 Opened Selected List File to write into
14 2023-03-26 06:29:50,713 Sent Ad list to server
```

# References

- Zero Knowledge Advertising: a new era of privacy-preserving AdTech solutions

