The results are in!

Here's what we recommend.

The Shawshank Redemption
1994, 9.3/10

The Dark Knight
2008, 9/10

Pulp Fiction
1994, 8.9/10

The Lord of the Rings: The Return of the King
2003, 8.9/10

Schindler's List
1993, 8.9/10

Inception
2010, 8.8/1

CinemaScout

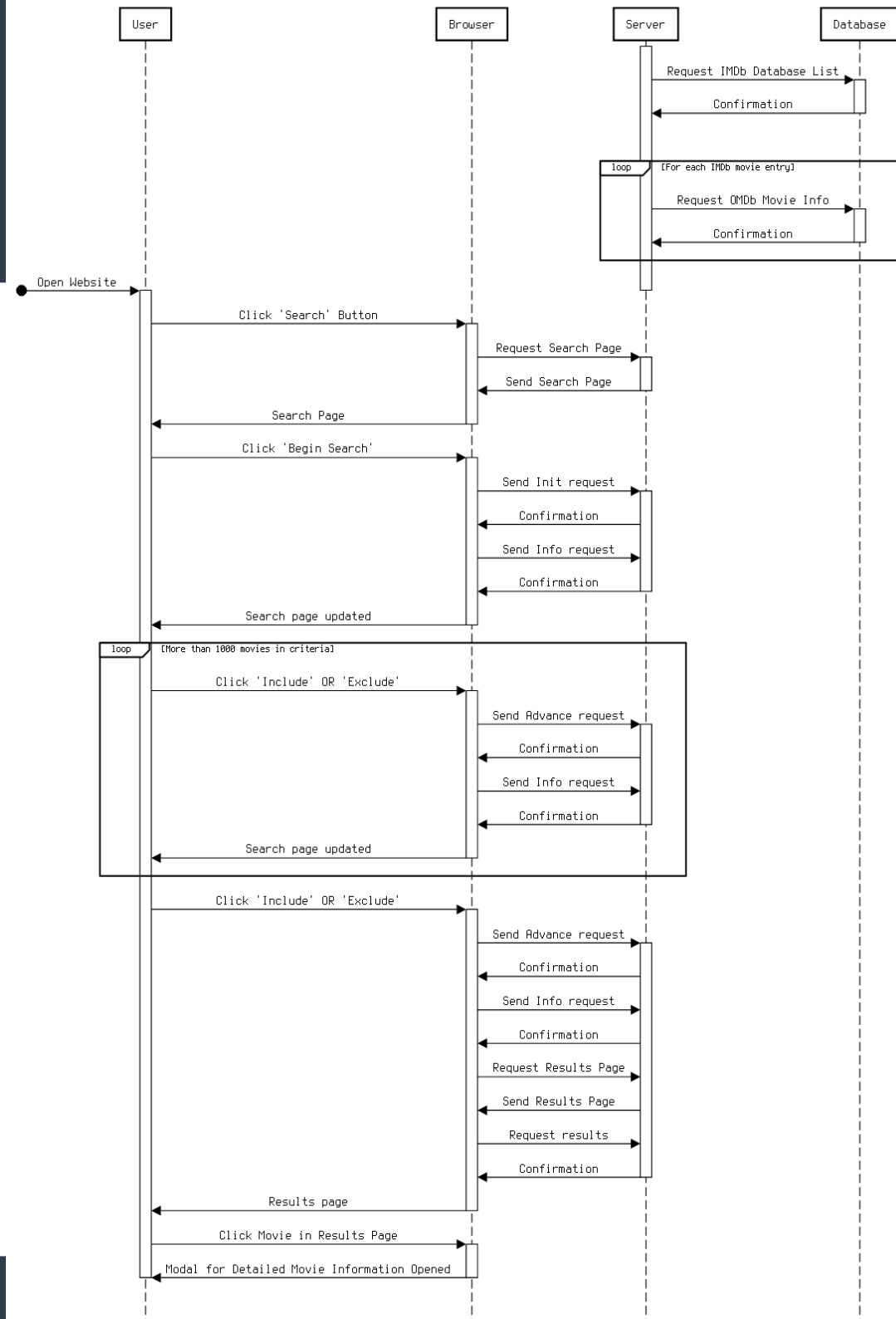An unbiased, ultrafast movie
traversal tool

Epic Group

But what does CinemaScout do?

- **~200 000 movie dataset (derived from 500 000 potential movies)**
- **Procedurally generated themes**
- **Include/exclude choices**
- **Genre based questions, then keywords derived from the plot**
- **Extremely fast and efficient, akin to a binary search in design**

Architecture

- **Uses IMDb (Internet Movie Database) and OMDb (Open Movie Database)**

- **All data is cached before the webserver starts and stored locally**

- **No communication to either while the webserver is running**

- **If either goes down or stops offering the service there is no loss of functionality**

User | Browser | Server | Database

Request IMDb Database List
Confirmation

loop [For each IMDb movie entry]
Request OMDb Movie Info
Confirmation

Open Website

Click 'Search' Button
Request Search Page
Send Search Page
Search Page

Click 'Begin Search'
Send Init request
Confirmation
Send Info request
Confirmation
Search page updated

loop [More than 1000 movies in criteria]
Click 'Include' OR 'Exclude'
Send Advance request
Confirmation
Send Info request
Confirmation
Search page updated

Click 'Include' OR 'Exclude'
Send Advance request
Confirmation
Send Info request
Confirmation
Request Results Page
Send Results Page
Request results
Confirmation
Results page

Click Movie in Results Page
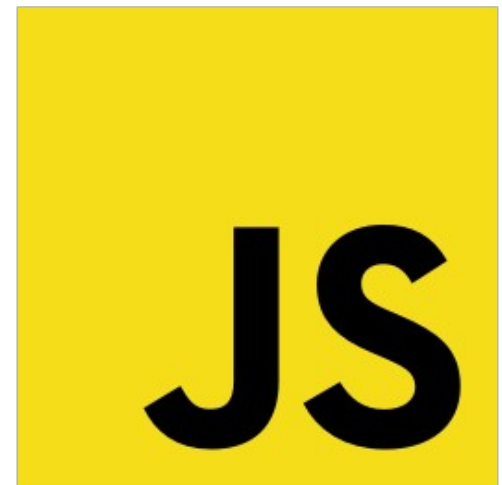Modal for Detailed Movie Information Opened

Frontend Stack Choices

- **UNIX philosophy: Do one thing and do it well (just recommend movies)**

- **Reduce unnecessary complexity**

- **No "bootstrapping" (copy pasting)**

Backend Stack Choices

- **Extreme performance + efficiency required**

- **Type-safe, compiled and familiar to us**

Third Party Dependencies

- **Frontend:**

BULMA.io

- **Backend:**

googletest
Google C++ Testing Framework

*Rapid*JSON

curl://

CMake

boost
C++ LIBRARIES

cpp-httplib

Live Demo Failure Portion

- **Hosted by Digital Pacific**
- **$30/Month AUD Hosting cost (cheapest one we could find)**
- **Probably also the weakest, 1 vCPU, 2GB of ram, likely weaker than your smartphone**
- **$12 AUD for the domain name (2 years)**
- **Will it fail? (untested under heavy load, good opportunity to find bugs now)**

Competitor Search Example

Competitor Search Example

Advantages over Google, Azn etc.

- **Complete impartiality, no monetary gain from manipulating search results, no business partners**

- **Deeper, more specific search ability**

- **Intuitive UI specific to movie searching**

- **Can recommend movies it doesn't serve**

- **No "history poisoning" (based on you clicking x, we think you like y)**

- **Market for recommendation dissatisfaction**

Viability of Deployment

- **Extremely low running costs**

- **Extremely low bandwidth requirements**

- **Little to no maintenance required**

- **No consequence of a security breach**

- **Extremely easy to monetise via Adsense (or alternative)**

- **Extremely easy to expand (codebase)**