Rakathon Presentation







By





I'm {Kapil Agarwal}.

Software Engineer @ PropertyShare, Bengaluru.



Software Engineer @ Rakuten India, Bengaluru.



### Problem Statement

- User Frustration: Users pause videos to capture items they like but struggle to find them online.
- Inefficient Process: Current methods like reverse image search are disconnected and often yield poor results.
- Missed Opportunities: This gap frustrates users and leads to missed e-commerce opportunities.
- User Retention Lost: users are more likely to loose continuity while watching their favourite contents.



### Our Solution

Seamless Integration: Ecom-MediaPlayer combines media consumption with e-commerce, allowing users to identify and purchase products directly from videos.

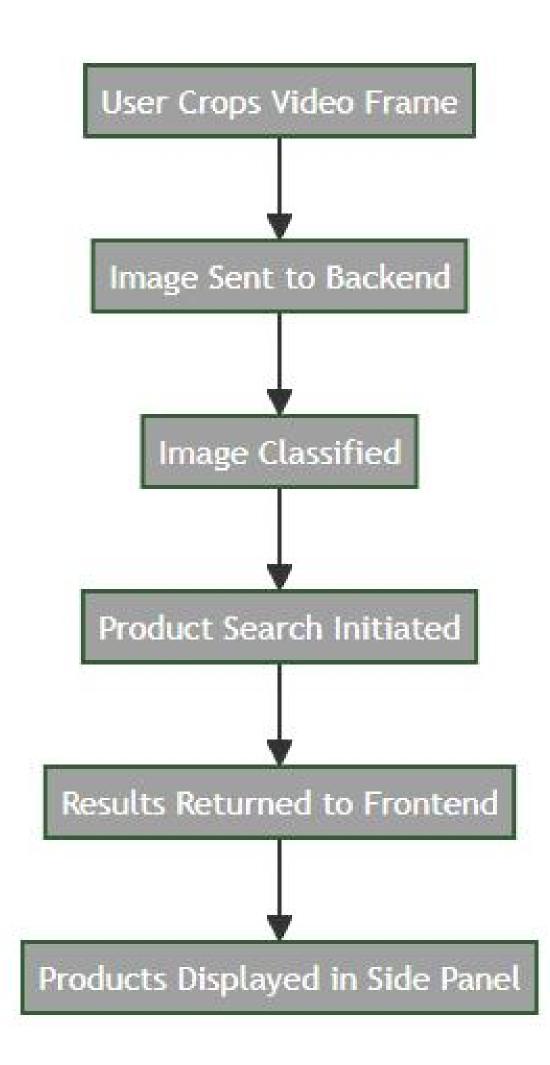
#### 2 Key Features:

- Crop M Identify: Select items of interest directly from the video frame.
- Real-Time Search: Automated search for matching products on e-commerce platforms.
- · Interactive Side Panel: View and purchase products without leaving the video.

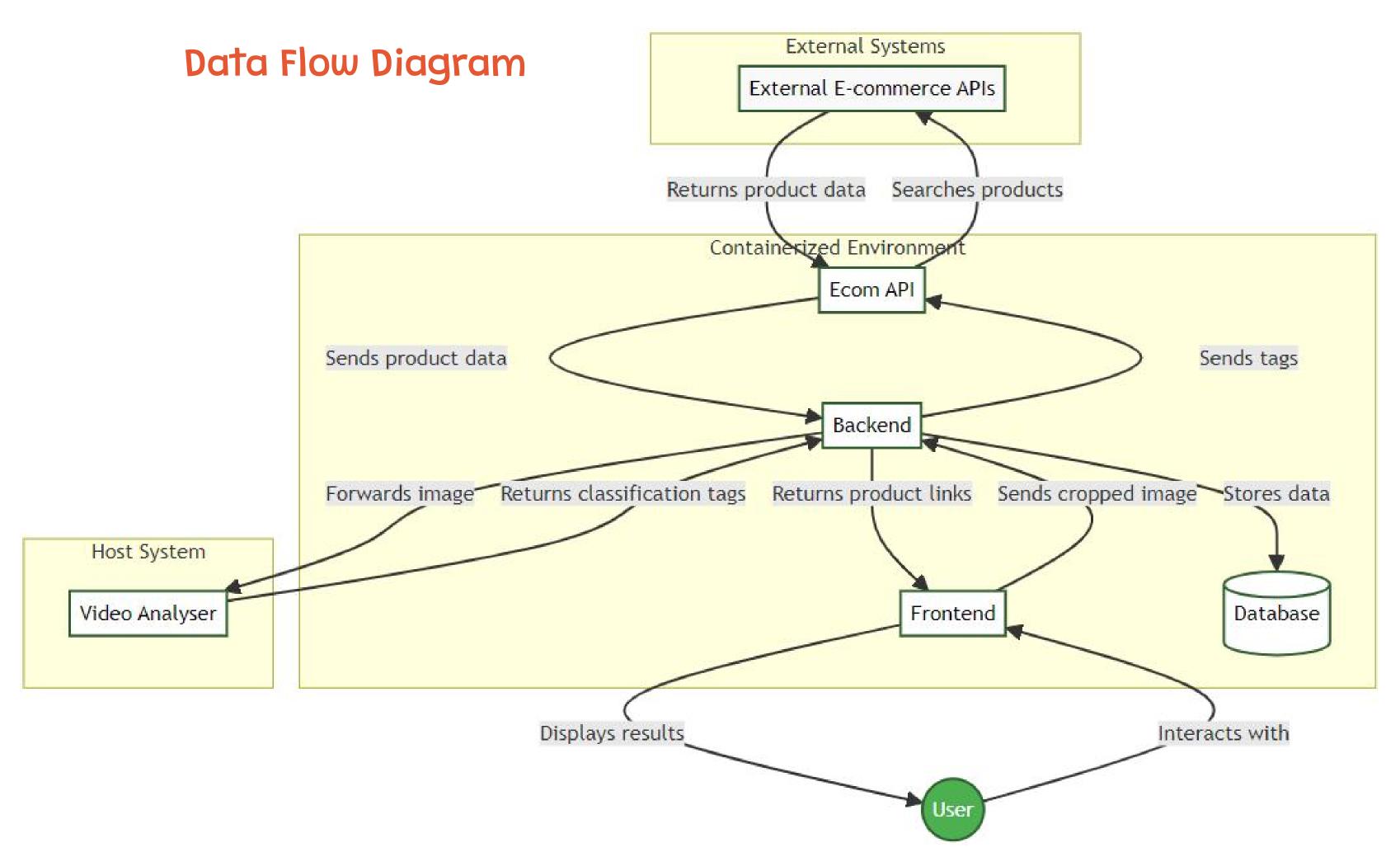
#### 3 How It Works:

Step – 1 : Crop a section on the video frame. Step – 2 : Enjoy watching your video while the system

searches the E-com sites for you. IT'S THAT SIMPLE!!



## Detailed Approach



#### System Architecture:

- Components: Frontend, Backend,
  Database, EcomAPI, VideoAnalyser.
- Containerized architecture for scalability and performance.

#### **Technology Stack:**

- Frontend: Svelte 
   Tailwind CSS.
- Backend: Laravel.
- Database: MySQL.
- · EcomAPI: Laravel.
- VideoAnalyser: Flask with a fine tuned ML model.
   ( yolos-fashionpedia )

## Impact Assessment

#### 1 User Benefits:

- · Streamlines shopping experience directly from videos.
- · Saves time and reduces frustration in product search.

### **Business Impact:**

- · Increases e-commerce conversions through seamless integration.
- · Creates new monetization opportunities in media content.

#### 3 Market Potential:

- "High scalability across various media platforms."
- · "Applicable to a wide range of industries, from fashion to home decor."



## Next Steps & Challenges

#### 1 Next Steps:

- Enhance product search accuracy with advanced ML models.
- Expand platform integration to more video and e-commerce sites.
- User testing and feedback loop for iterative improvements.
- · Explore partnerships with e-commerce platforms.

#### 2 Challenges:

- · Ensuring real-time performance at scale.
- · Handling diverse and complex product categories.
- Maintaining privacy and data security.
- · Adapting to different video formats and qualities.

# Thank You