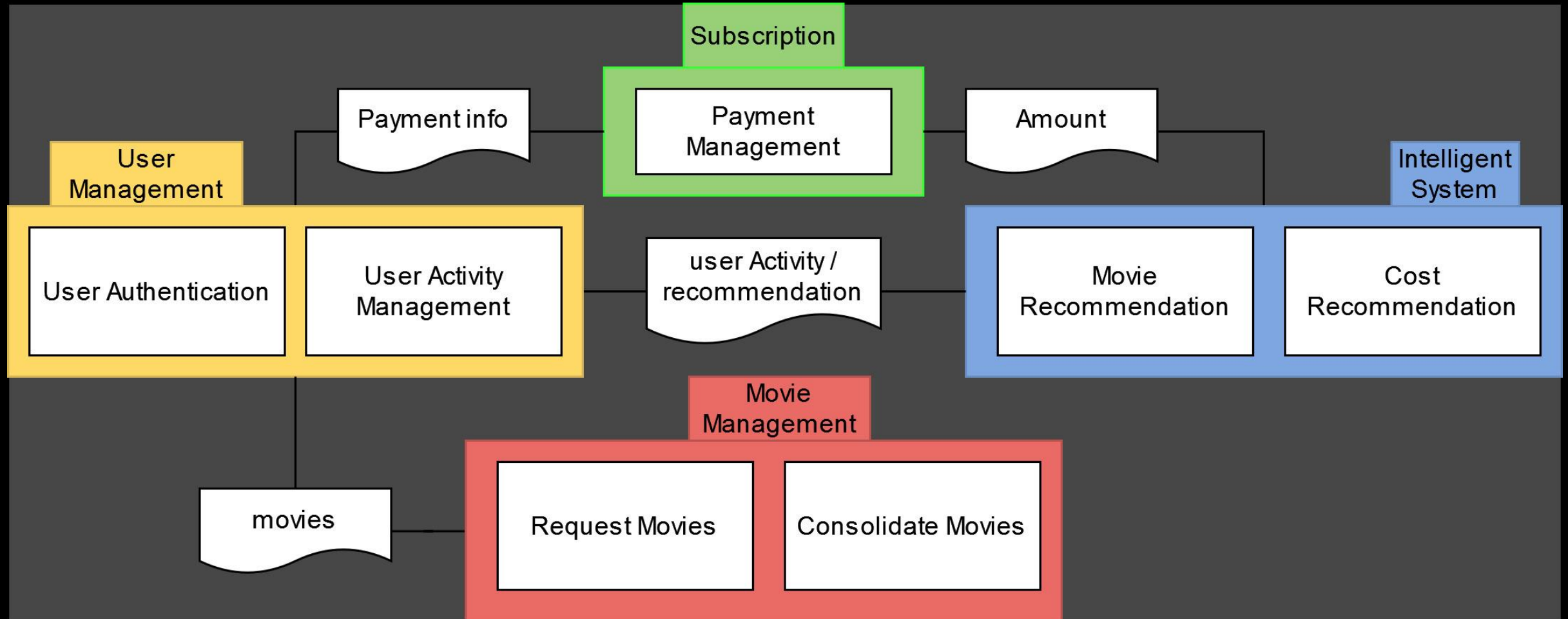


CineStream Architecture

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Modules and Services



Movie Management

1. *List CineStream Movies*: Lists movies from CineStream OTT
2. *List Other Source Movies*: Gathers' from other OTT platforms
 1. Netflix Service – Asynchronous
 2. Prime Service – Asynchronous
3. *Consolidate Movies*: makes requests to the Above microservices
- Not ideal – Unnecessary
4. *Rent Movies*: Synchronous - requests to the Other Movies Services

CineStream and Other Movie Management

- Manage Movies Service – Within our OTT
 - Name
 - Language
- Other Movies Service – Scalable
 - Name
 - Language
 - Source: 1/2/3 OR prime/Netflix/
 - Cost

User Authentication Service

Database

- User Table
 - User ID
 - Email
 - Language preference
 - Days Left
- Authentication – Synchronous : Validates User in DB

User Activity Management Service

Database

- Activity Table
 - User ID
 - Movie ID
 - Rating: -1, 0, 1
- Capture User Actions - Asynchronous

Movie Recommendation Service - Async

- UID
- MID
- Ranking

Both intelligent systems interact with User Activity Management Microservice to provide Movie and cost recommendations.

Cost Recommendation Service – Sync

- UID
- Price

Intelligence Module – Price Recommendation

Database

- Price Table
 - User ID
 - Price
- Price Suggestion
 - Updates prices / User - Asynchronous post
 - Get price – Synchronous – Used by Payment service

Payment Microservice

Database: NA

- Payment – Synchronous Post
 - 1 month – 30 days
 - 1 year – 365 days
- Routes:
 - Subscribe Page

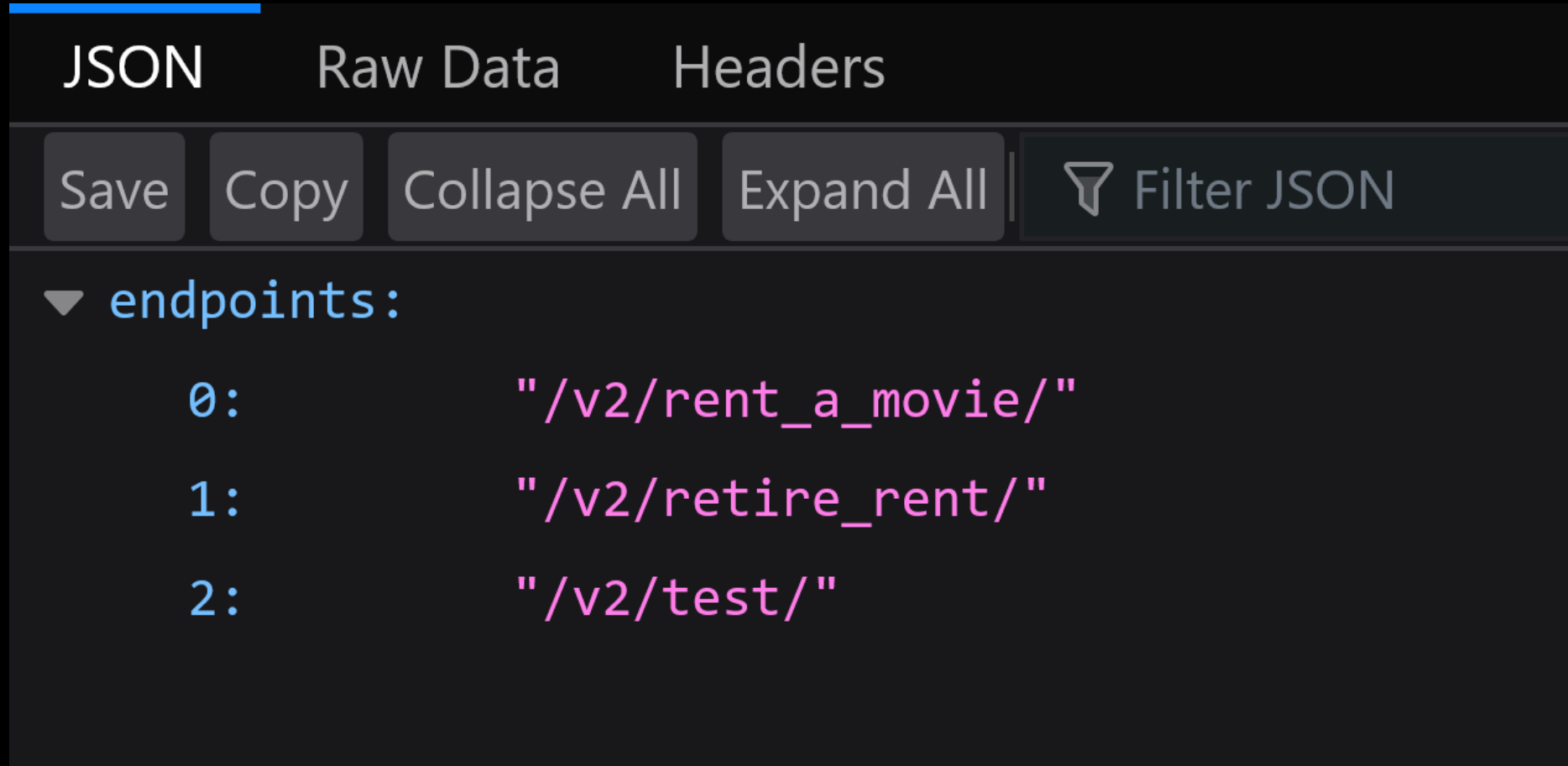
Inputs from:

- User Module: To Check User
- Intelligence Module: to check for user price

Stack

- Backend: Python
- Microservice Stack:
 - FastAPI – Rest APIs
- Database: SQLite/JSON

API Gateway Implementation - Incomplete



The screenshot shows a web interface for viewing API data. At the top, there are three tabs: 'JSON' (which is selected and highlighted with a blue underline), 'Raw Data', and 'Headers'. Below the tabs is a toolbar with five buttons: 'Save', 'Copy', 'Collapse All', 'Expand All', and 'Filter JSON' (which includes a funnel icon). The main area displays a JSON object with a single key 'endpoints' that has been expanded, indicated by a downward-pointing triangle. The 'endpoints' value is an array of three strings, each representing an API endpoint path. The array indices (0, 1, 2) are shown in blue, while the endpoint paths are in pink.

```
▼ endpoints:  
  0:      "/v2/rent_a_movie/"  
  1:      "/v2/retire_rent/"  
  2:      "/v2/test/"
```