

Hybrid Recommender system

User engagement ↑



Personalized



Content Based

User retention ↑



Diverse



Collaborative



$$\underline{\text{Sim Scores}} = w_1 \times \text{sim CB} + w_2 \times \text{sim CF}$$



Sort → Top K recommendations

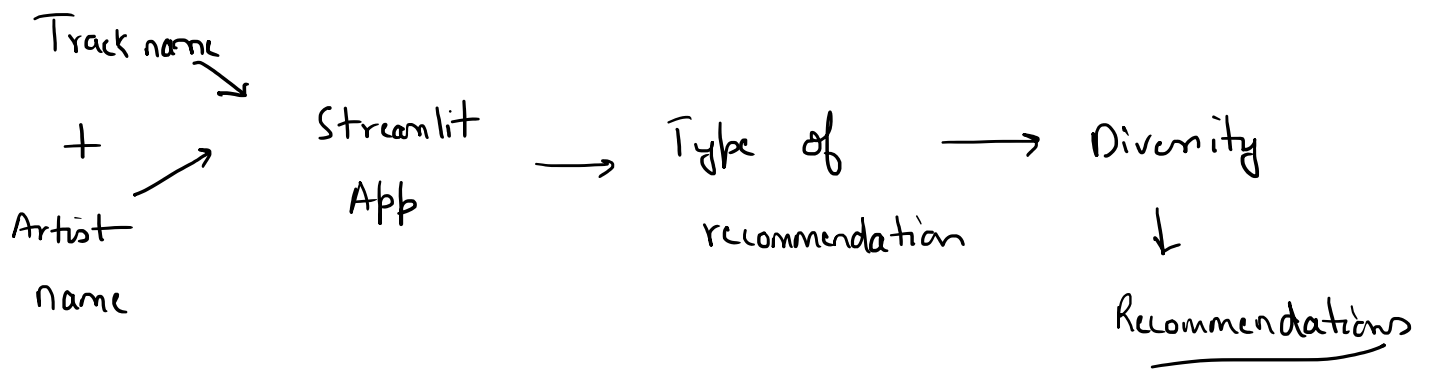
Problems :-

1) Dynamic → Diversity → More diverse CF ↑ w_2 ↑

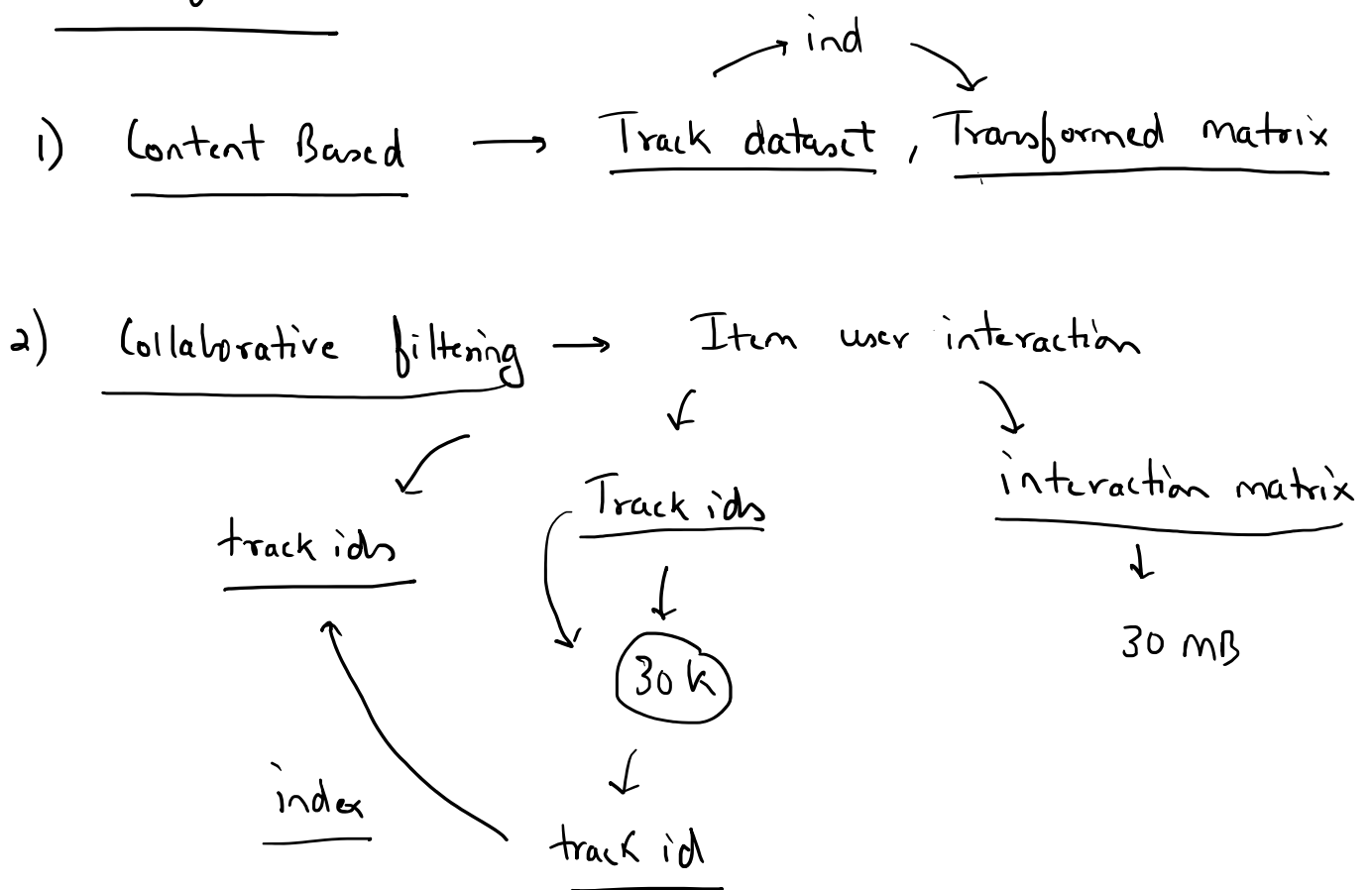
less diverse CB ↑ w_1 ↑

2) Cold start → 30k , 50k → Only content based
topk

Track

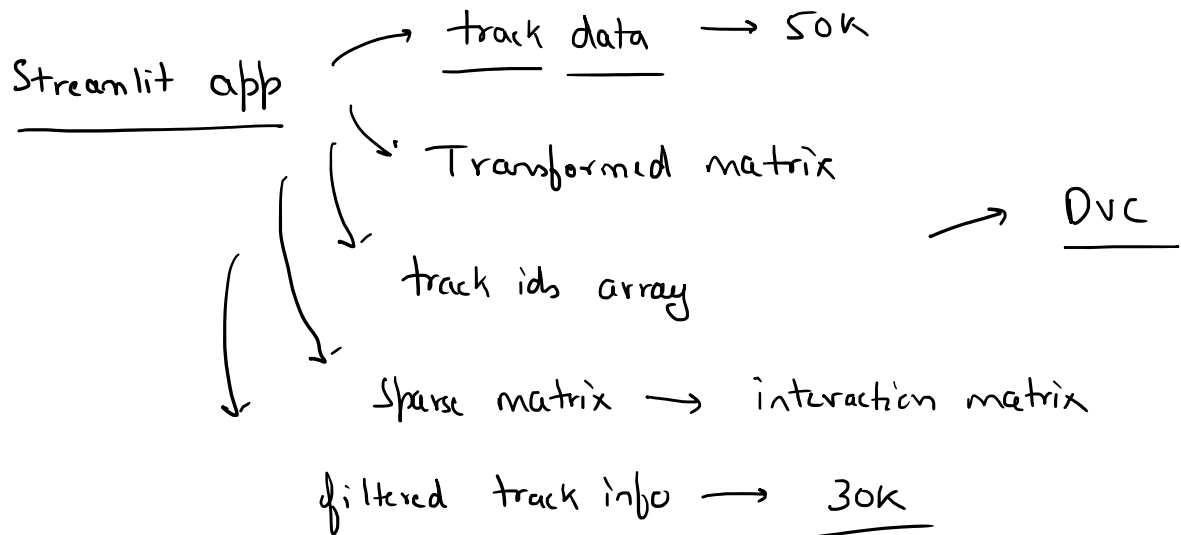


Prerequisites:-



Deployment

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1) CI → GitHub Runner → test ✓

2) CD → Docker image → Push on ECR

3) Run the app on a single EC2

↓
docker install
image ECR pull
container run
app live

4) Code Deploy → Blue Green Deployment

Part 1

Part 2

ASG → 2 - 5

Version 0.2 → code changes
n .

ASH → 2 - 5
Application
Deployment
Deployment
Version 0.1

Version 0.2 → code changes

Push

Code Deploy → 0.2

ASH

Blue Green Deployment

Model Registry → Versions of our model

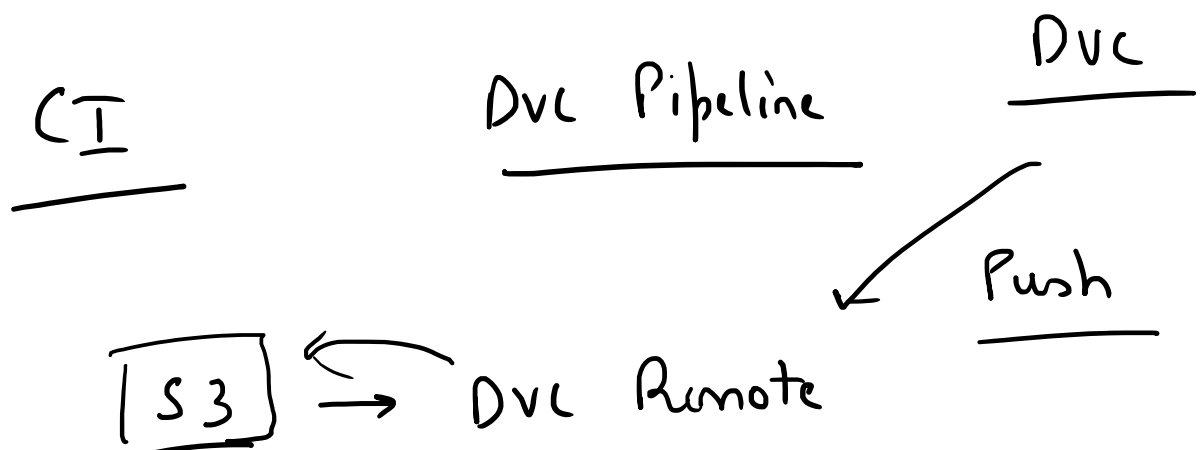
Ver 0.1 , Ver 0.2 → ECR
Docker tags.

image → tags (latest)

Flow

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12:23



CI → Code checkout → Runner

Python

lib

AWS S3 Authenticate

S3 → Pull

Cmd → Streamlit app

Test the endpoint

End the CI stage
