



## Logic Trending Jobs System:

### Core Concept:

Trending = "Jobs đang hot" dựa trên user behavior và thời gian

### Factors quyết định Trending:

#### 1. User Engagement Metrics:

- View Count:** Bao nhiêu người xem job
- Save Count:** Bao nhiêu người lưu job
- Application Count:** Bao nhiêu người apply
- Search Frequency:** Job xuất hiện trong search bao nhiêu lần

#### 2. Time Factor:

- Recency:** Jobs mới post gets boost
- Momentum:** Tăng trưởng engagement trong thời gian ngắn
- Decay:** Jobs cũ giảm trending score theo thời gian

#### 3. Quality Indicators:

- Company reputation:** Big companies → higher weight
- Salary attractiveness:** High salary → more trending potential
- Job type popularity:** Popular roles (Developer, PM) → boost

### Scoring Algorithm Logic:

#### Weighted Formula:

```
Trending Score = (Views × 1) + (Saves × 3) + (Applications × 5) +  
                    (Recency Boost) + (Industry Popularity) + (Salary Appeal)
```

## **Weight Reasoning:**

- **Views (1x)**: Easy action, lowest value
- **Saves (3x)**: Shows real interest
- **Applications (5x)**: Highest commitment, most valuable
- **Recency Boost**: Fresh jobs get 2-7 days advantage
- **Location Factor**: Jobs in major cities get slight boost

## **Ranking Logic:**

### **Daily Calculation Process:**

1. **Collect Data**: Gather all engagement metrics từ last 30 days
2. **Calculate Scores**: Apply weighted formula cho từng job
3. **Rank Jobs**: Sort by score, assign ranking 1, 2, 3...
4. **Mark Trending**: Top 50-100 jobs marked as "trending"
5. **Update Display**: Frontend shows ranked trending jobs

### **Categories:**

- **Overall Trending**: All jobs across industries
- **Industry Trending**: Hot jobs per industry (Tech, Finance, etc.)
- **Location Trending**: Hot jobs per city
- **Experience Level**: Entry, Mid, Senior trending separately

## **Real-time vs Batch Processing:**

### **Real-time Updates:**

- User views job → Increment view count immediately
- User saves job → Increment save count immediately
- User applies → Increment application count immediately

### **Batch Processing (Scheduled):**

- **Every Hour**: Recalculate trending scores
- **Daily**: Update rankings và trending status
- **Weekly**: Reset old data, cleanup expired jobs

## □ Display Logic:

- **Trending Badge:** "#1 Trending", "#2 Trending"
- **Hot Indicator:** Fire icon, "Hot"
- **Rising Fast:** Arrow up "Rising"
- **Momentum Info:** "+25% applications this week"

## Filtering Options:

- **All Trending:** Mixed industries
- **By Industry:** "Trending in Technology"
- **By Location:** "Hot jobs in Ho Chi Minh City"
- **By Experience:** "Trending for Mid-level"

## □ Business Intelligence:

### Analytics Tracking:

- **Which types of jobs trend most?**
- **What makes a job go viral?**
- **Industry trending patterns**
- **Seasonal trending shifts**
- **User behavior insights**

### Company Benefits:

- **Trending jobs get more visibility**
- **Companies can see job performance**
- **Optimization insights:** "Post on Tuesday for best reach"

## □ Advanced Features:

### Personalized Trending:

- **User's industry preference** affects their trending view
- **Location-based trending** for user's area
- **Experience level matching**

## Predictive Trending:

- **Jobs likely to become trending** (early indicators)
- **Seasonal predictions:** "Tax season → Accounting jobs will trend"
- **Market trend analysis:** "AI jobs trending upward"

## Technical Considerations:

### Performance:

- **Caching:** Trending results cached for fast loading
- **Indexing:** Database indexes on trending fields
- **Batch Updates:** Avoid real-time calculation overhead

### Data Integrity:

- **Spam Protection:** Prevent fake views/saves
- **Data Validation:** Clean engagement data
- **Historical Tracking:** Keep trending history for analysis

## Success Metrics:

### KPIs:

- **Click-through Rate:** Trending section → Job details
- **Application Rate:** Trending jobs vs regular jobs
- **User Engagement:** Time spent on trending section
- **Business Impact:** More companies want trending visibility

## Tóm tắt Logic Flow:

**User Interactions → Data Collection → Score Calculation → Ranking → Display → More Interactions → Cycle continues**

**Goal:** Surface the most relevant, attractive jobs dựa trên collective user wisdom và real-time market demand.

**Trending = Community-driven job recommendation system!**