**Introduction**

NowSee is an everyday, real-time weather community. Users can (1) View real-time weather statistics, (2) Look around live weather feeds, and (3) Create weather posts. NowSee can come in handy in several circumstances. What if you’re taking your graduation photos today, but the weather forecast only shows a question mark? What if you’re at building 302 but have no idea of knowing whether bus services were suspended due to snow? On Nowsee, you’ll be able to get the answers promptly. With NowSee, users don’t need to worry about the weather. Simply open NowSee, select the location you’re headed for, and you’ll be perfectly prepared for the weather today.

**System Architecture**

- **Backend**
  - Django
  - REST Framework
  - Docker
  - React
  - Redux
  - Docker, Nginx, uwsgi

- **Frontend**
  - OpenWeather
  - KakaoMap

- **Web Server**
  - Nginx, uwsgi

**Responsive Design**

- **Desktop View**
- **Mobile View**

**Page Description**

- **Main page**
  Users can report the weather and make custom area settings (radius, location)

- **Area feed**
  Shows weather statistics and posts of the area

- **Hash feed**
  Gathers posts related to a hashtag keyword
  Shows where the hashtags were frequently mentioned

- **Post detail**
  Users can find out the details of a post and interact with others by replying to the post

- **My page / My badges**
  Users can view their own posts and set their main badge

**Container Reuse**

- **Area Feed**
- **Hash Feed**
- **Post Detail**
- **My page**

**Recommendation / Optimization**

User-based Collaborative Filtering

Score of hashtag ₁ = \sum_{users} sim(user, j) \times posts(i, j)

sim(user, j) = (hashtags(user) ∩ hashtags(j)).length
posts(i, j) = length of posts containing i written by j

\text{top k} = \max_k \{\text{score}(h_i) + \text{posts}(i)_{\text{sim}[:\text{hashtags}]})

For Database Optimization, use...

Cached data, 'select_related' for foreign keys, 'values_list' for computation

**Feedbacks**

- ✔ Add lock icon to locked badges
- ✔ Hash Feed: Insight collected from hashtags
- ✔ View collected ‘my posts’
- ✔ Automatically log in when sign up

**Future Works**

- Save favorite location
- Adjust report score to make statistically unbiased
- Recommend weather related items
- Add more badges

https://nowsee.today