



Non-functional requirements and explanation of how above architectural design satisfies each of them:

- The system must be able to return the current weather data for 5000 requests per hour, with response time under 5 seconds.
Our third-party weather APIs support at least 5,000,000 calls per month.
- The login process must be OAuth 2.0 compliant.
We use third-party authentication APIs that support OAuth 2.0, including third-party login using Google Sign-in, Facebook Sign-in.
- The uptime must be 99.999% every day from 6am to 2am.
We have different sets of backup APIs and Database clusters.
- The restoration time after each system failure must not exceed 1 hour.
We have different sets of backup APIs and Database clusters.