

## Weather forecast Assignment

The service will offer users the ability to be updated on weather forecasts for areas of the territory using multiple forecasting platforms (e.g. Accuweather, EMY, Meteo.gr). After registering and creating a profile in the system, the user will be able to search for weather forecast data for specific areas. Forecast items will be current weather, hourly forecast for the next 3 hours and daily forecast for the next 3 days with 3 forecasts per day (at 08:00, 15:00 and 21:00). The user will have the ability to download forecast analytics (the ability to download analytics refers to receiving a response from the system that includes two or more forecasts, one from each forecast service) or aggregates resulting from weighting the data of the individual services ( eg return the forecast with the highest number of user ratings). When creating their profile, the user will select the forecasting services he wants to use.

The user will be able to rate each prediction on a scale of 1 (not at all satisfied) to 5 (completely satisfied). The users' ratings will be used to calculate the aggregate forecast per region (depending on the ratings, the system will suggest to the user a forecast from the service(s) with the highest score). To efficiently respond to searches, the system will periodically receive and store forecast data from all partner services. For this purpose, it will provide a suitable API which will be called by the cooperating services in order to update forecasts by region, when some changes occur in them. Finally, the application will have the ability to send warning messages to the user in case of bad weather (only in cases of danger to life) for all the areas of interest registered in their profile