System Requirements

Project name: Weather forecast customized for farmers

Date:2022/11/1

By:Group17 Qimeng Yang、Baoqi Gong、Sihan Wu、Mingyan Wei、Haoqi Xue

1.Introduction

The weather forecast application customized for farmers is a useful application, which can provide accurate weather information and relevant tips for farmers and promote the development of agricultural economy. It can not only provide real-time weather forecast, but also provide farmers with various requirements and corresponding measures related to agriculture. It is not only available to farmers, but also can be your daily weather forecast application!

2.Product scope

- 1. Provide real-time weather information (such as temperature, humidity, UV intensity, rainfall, etc.)
- 2. Provide possible impacts of weather conditions related to agriculture
- 3. Provide agricultural countermeasures
- 4. Provide weather conditions in the next ten days
- 5. Provide air quality index
- 6. Early warning of meteorological disasters



3.Product value

- 1. Promoting agricultural economic development is conducive to better agricultural activities and the smooth work of agricultural producers.
- 2. Affect the agricultural economy, profit and loss, and benefit the economic growth of companies or individuals related to agriculture.
- 3. Reduce farmers' workload and hardship, and facilitate users' life and work.
- 4. Improve the quality and quantity of crops and promote the economic development of the industry.

4. Intended audience

- 1. People who need weather forecast for agricultural activities.
- 2. Agriculture related companies and enterprises.
- 3. Government departments that manage agricultural economic development.
- 4. Other people who need weather forecast.

5. Intended Use

- 1. The user can select the required function or information in the interface to search.
- 2. Farmers can know weather conditions in advance through weather forecast, so as to make adjustments to agricultural production.
- 3. The weather forecast is made through the analysis of meteorological monitoring data.



At the same time, farmers are guided to choose suitable crops according to the growth characteristics, growth conditions and demands for external conditions of different kinds of crops, and the best time for farmers to plant crops is guided.

4. Other users can learn weather information through weather forecast, so as to better daily life and work.

6. General description

- 1. Provide help for farmers' work.
- 2. It is applied to agricultural production and provides all weather information necessary for agricultural production.
- 3. Provide basic weather information to meet the needs of daily life.

7. Essential features

- 1. A variety of functions to meet the needs of farmers in the use of farming, industry, planting, and other aspects.
- 2. Accurate forecasting, accurate determination of the day's climate, more accurate forecast of the next few days of temperature and rain, and air quality.
- 3. Beautiful interface, personality, fresh, flat.

8. Desirable features

1. Convenience in operation

In terms of operability, the weather forecast APP software mainly presents the weather



content for users through the cell phone platform, then users can make full use of the usual time to check the cell phone.

2. Realize accurate forecast function

The forecasting service provided by the weather forecast APP software can be more precise and accurate in terms of forecasting, so that users can view the content in real time. The weather forecast is accurate to every moment of the recent past, and can also achieve the need to optimize the user query experience.

3. Provide agricultural related information and agricultural guidance

Provide corresponding agricultural guidance and suggestions according to current and future possible weather conditions.



Operating Instructions

1. System introduction:

Weather forecast is the estimation and prediction of weather changes, especially disastrous weather, in a certain period in the future. It is released to the public by the authorized meteorological operation department, including daily forecast and professional forecast for the public. This system has five components, namely, data collection, data assimilation, data weather, output processing, and important tools.

The weather forecast system is a large scale system, which can be used through websites or software, as well as regular reports from TV stations. With the increasing popularity and deepening of computer applications, it has become a trend to know the weather conditions of today and tomorrow anytime and anywhere. The weather forecast system is an information system integrating various weather query services. It can not only save time, but also realize personalized services, reduce unnecessary waiting and redundant information, and facilitate users to timely understand the latest weather conditions for daily life and work.

2. How to use the weather forecast system:

First download the corresponding software or enter the website, set your own region and role, and then click the command button to obtain the corresponding weather



information. In addition, open the prompt, receive the corresponding information in time, and ensure that you can get all weather information. Finally, you need to save the above settings. No matter when you click the system again, you do not need to fill in the information again. The operator shall pay attention to learning the professional terms and corresponding knowledge in the system to obtain more accurate information, and shall confirm whether the regional and personal information is correct and complete. Pay attention to the timeliness of weather information, update the page in time, and get the latest news.

3. Operating environment and time:

The system can be used in many cases, and the GPS should be kept on. In order to ensure the accuracy of information, the system will only provide weather forecast information for a period of time, in addition, it also provides the curve of weather change for this period of time, which can more intuitively show the weather change. Note: For special groups: children and the elderly can complete the operation of the system with the help of others. In addition, the system is equipped with a shortcut mode, and fonts and patterns can be adjusted. Its voice broadcast function is also more convenient for special groups.

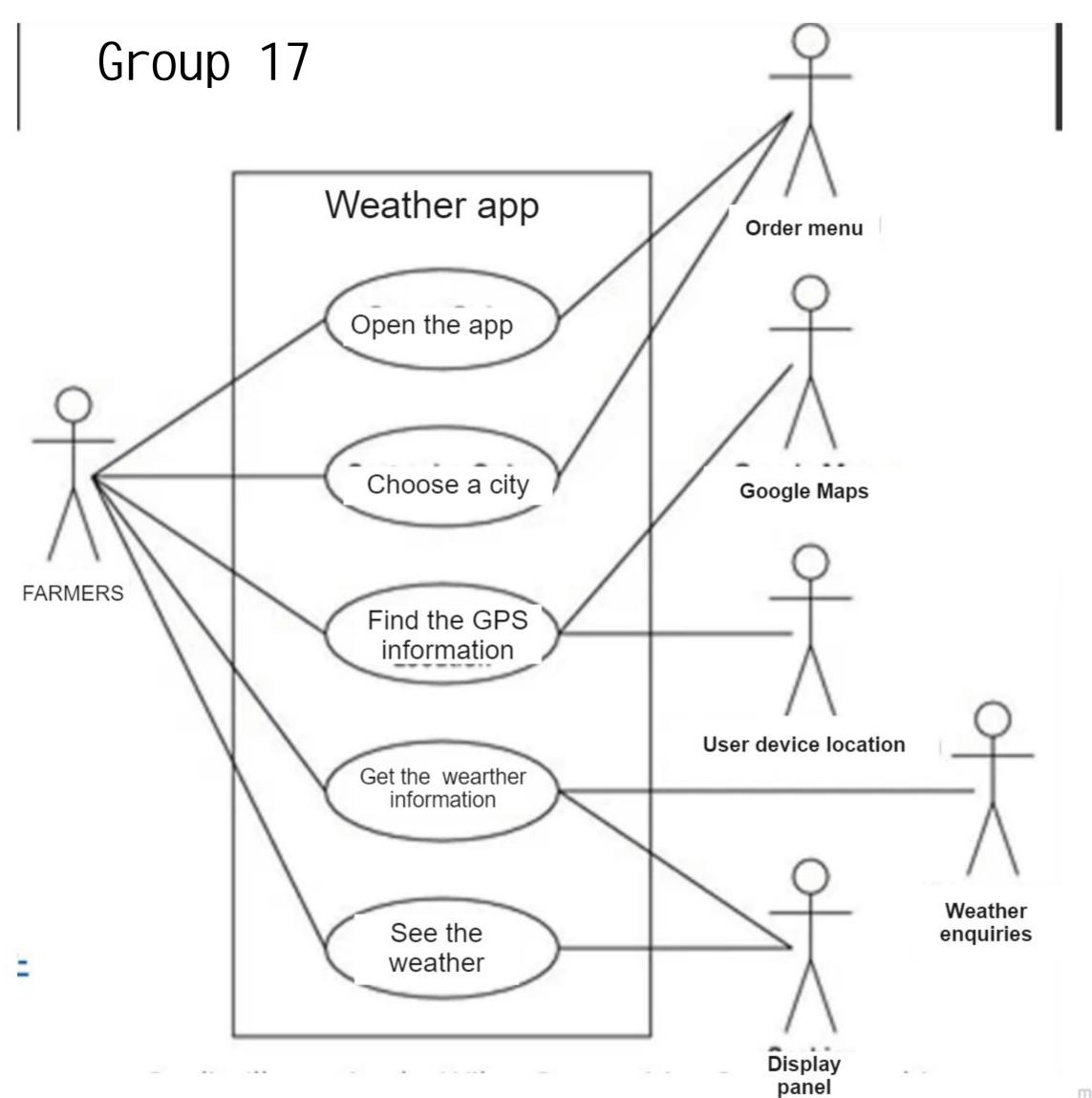
Problems during use:

If there are some problems during use, you can first refresh the website and check



the relevant settings. If there are still doubts, you can consult the relevant website service center online. There may be some discrepancy between the information provided by the system and the actual situation. Users can feed back to the Program Management Office at any time and solve the relevant problems in a timely manner. To prevent some problems, please pay attention to the system information at any time, and update and repair the system according to the corresponding recommendations.





Group 17

User-Story Map

