# **Background and Motivation**

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This project is built on top of many existing infrastructure and previous work.

On the infrastructure side, we used DockerHub to facilitate our development. A Linux environment was set up and ready to use as a Docker image, inside of which the MySQL database was installed and loaded with data. We were able to work simultaneously on the project, by sharing the Docker image. Instead of using the Docker command prompt, we were able to mount a local folder into the Docker image, and take advantage of IDEs.

We used github to manage our code repository and version control. It is a great tool to make sure that we track code changes, and can always have the option to revert to previous changes if the current one breaks the system.

Furthermore, inside the MySQL database, we were provided with information of all the public climate services that we need to work with, and the dataset information. Such information includes climate service main page, climate service version, and so on.

# **Motivation**

There are several motivations for implementing the climate service manage system.

For the service provider, this system can help them view other climate services, manage their own climate service, view comment and feedback of the service consumers on their climate service main page, and compare their feedback from the service consumers with other available climate services.

For the service consumer, they are exposed to all climate services in the management system, which makes the selection process much easier. They can quickly discover great services, and promote new services that they think work well. Furthermore, they can interact with other users on the management system via hashtaging or mentioning.