A sequence diagram shows all the messages in a system. It is used to show the interactions between objects in the sequential order that those interactions occur.

In this environmental service system, there is a user. The user can login. The database validates the login. The user can subscribe to updates. The database confirms subscription status. The user can update their location. The database confirms the location.

The user can request water quality. The database can tell if the location is bad, and sends an error. If the location is valid, the database sends the location to the water probe. The water probe can then send the water quality back to the database, which then sends the readable water quality to the user.

The user can request air quality. The database can tell if the location is bad, and sends an error. If the location is valid, the database sends the location to the water probe. The air probe can then send the air quality back to the database, which then sends the readable air quality to the user.

The user can request forest quality. The database can tell if the location is bad, and sends an error. If the location is valid, the database sends the location to the forest probe. The forest probe can then send the forest quality back to the database, which then sends the readable forest quality to the user.

The user can request prediction. The database can tell if the location is bad, and sends an error. If the location is valid, the database sends the location to the prediction generator. The prediction generator then requests water quality from the water probe. The water probe sends water quality to the prediction generator. The prediction generator then requests air quality from the air probe. The air probe air quality to the prediction generator. The prediction generator then requests forest quality from the forest probe. The forest probe sends forest quality to the prediction generator. From there, the prediction generator uses its algorithm to generate a prediction. The prediction generator then sends its prediction to the database, which then sends it in a readable format to the user.