

# Preparation & Pre-assignment

TDA596 - Distributed Systems

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## **What is Seattle?**

Seattle is a free and community-driven platform for networking and distributed systems. The global distribution of the Seattle network makes it ideal for applications such as: peer-to-peer networking and distributed systems. As a user on the Seattle network you can distribute your resources and programs on different machines spread all over the world.

## **What is a vessel in the Seattle framework?**

A vessel is a resource that a user can acquire to execute a program on.

## **Which programming language is used to write programs to run on Seattle? How does it relate to Python? Explain briefly why it is used, instead of Python.**

To write programs on Seattle repy is used, which is a restricted version of python. Many of the built-in function in python is not useable in repy in order to ensure cross platform compability and security for the end users.

## **Write the full command to run locally a program written in the language in the previous question?**

`python <path to repy.py> <path to restrictions file> <path to source file>`

## **List all steps to run a program remotely in vessels.**

1. `python seash.py`
2. `loadkeys <username>`
3. `as <username>`
4. `browse`
5. `on browsegood`
6. `run <file.repy>`

## **In the HelloWorld Example in the Repy tutorial (see <https://seattle.poly.edu/wiki/RepyTutorial>), what is this line “listencommhandle = waitforconn(ip,port,hello)” for?**

It tries to establish a connection on localhost with port 12345 with a callback to the function hello which will be executed if the connection succeeded.