1. **Till now** 
   1. we downloaded and installed Docker for Windows/Mac on personal computer.
   2. We also ran the command **docker version**
2. Let’s study the command **docker run and the flow of action with this command.**
3. Text

   Description automatically generated
   1. Let’s study the “Unable to find image ‘hello-world:latest’ locally’
   2. Let’s try to understand with some diagrams.
      1. Command **docker run hello-world** starts up Docker Client.  
         Docker Client is in charge of taking command from you, then kind of doing a little bit of processing on them and then communicating the commands over to Docker Server.  
         Docker server is in charge of heavy lifting.  
         With this command, we’re trying to create a new container based on image **hello-world**.  
         hello-world image has a tinny little program inside of it whose sole job is to print out the message as you can see in the below screen.  
         Text

         Description automatically generated  
         When we run the command docker run hello-world and it was issued over to the Docker Server, a series of actions very quickly in the background of Docker Server.  
         **Docker Hub**: It is a free service.
         1. A repository of free public images so you can freely download and run on your personal computer.

Docker Server reached out to Docker Hub and said “Hey, I’m looking for an image called hello-world”.  
Graphical user interface, diagram, application

Description automatically generated

* + 1. Diagram

       Description automatically generated
    2. As Docker Server got the image so now it can create container from this image.  
       A look at what a container is?  
       Diagram

       Description automatically generated with medium confidence
    3. So now Docker Server will pick that single file “hello-world” from cache, will load into memory, will container out of it and then will run the single program inside of it.