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| What is Docker |  |
| VM vs Container |  |
| Docker Arch. |  |
| Images vs Containers |  |
| Choosing right base image |  |
| Docker File Instructions |  |
| FROM to specify base image (OS or OS + runtime env) |
| COPY to copy files and directories to the image |
| ADD same as COPY with 2 more options, adding file from a URL, and it automatically uncompress any compressed files when added to the image |
| To optimize build time, copy rarely changed files at the top like req files then install them so the build command doesn’t need to reinstall them every time |
| RUN to execute any command at **BUILD** time |
| CMD to execute any command at **RUN** time, ONLY ONE in the docker file |
| ENV to add an environment variable |
| EXPOSE to tell the container which port to use |
| USER to set a user |
| CMD has two forms CMD … … this executes the command in a newly created shell CMD [“…”,”…”] this executes the command on current shell (FASTER) |
| ENTRYPOINT same as CMD but Harder to override |
| WORKDIR sets the work directory |
| Docker start vs run vs exec | Start starts a stopped container, run runs a new container, exec executes on a running container |
| How to publish an image | Give it a tag like username/reponame |
| What are Volumes |  |
| Docker composer |  |
| DEMO |  |