Name: mcp-391-cswg-workshop-making-with-make-and-makefiles
Title: making with make and makefiles
Status: Draft -- anyone can edit.

See the [MCP index](#) to create or find documents, or [mcp-0-readme](#) for an overview.
The headers above are machine-readable; please preserve format.

Text checkins (10 mins)

- Steve
    - Home!
    - Still recovering from trip
    - made more progress on [grid-cli](#) design though -- now working on layer layout
    - gearing up to complete pilot's license
        - **I will be missing our group meeting on 01 Oct for flight physical renewal**
- JJ
    - Found a bug in the Go pkgsite documentation
    - Tonight, cleaning off the roof!
    - Preparing for kiddo to move out
    - Planning on visiting ABQ…aiming for 1st week in Oct
    - Learning about biofilm. :\ Whether I want to or not
- Rebecca
    - Intereting article about maker events I read this week
      https://www.pcma.org/bringing-maker-movement-events/
    - Makerspace move to new building continues, will be moved out of old building by the end of the month, might take a couple weeks to get up to speed in new building
        - We found out that some of the issues around the occupancy permit were not as complicated/involved as we thought, because the building is no longer a k-12 school
    - Back from trip to Pacific Northwest
        - Boeing museum in Everett
        - Stayed at Tacoma Elks lodge which has been refurbished into a hotel
        - Glass museum in Tacoma, had some interesting details on studio glass which reminds me of our little group here in some ways
        - Took car ferry to Vashon Island and looked at water sights
        - Portland downtown and visiting friends and relatives

- Donaldo

- - Completing tool trainings at West Houston Institute, their makerspace pretty well organized, taking notes on potential tips & tricks
    - Schedule getting busy, classes & events, but feels good
      - classes: electronics fab, embroidery machine, laser cutter, woodshop, 3d printing, desktop CNC, metal shop
    - Houston finally cooling down, looking to set up garden
  - Angela
    - Learned how to crochet last night
    - Also made some stickers out of some drawings i made

Making with 'make' and Makefiles (70 mins)

- Presentation (10-20 mins):
  - https://github.com/ciwg/workshop-2024-09-10-make
  - (btw slides tool today is https://github.com/maaslalani/slides)
    - slides from markdown
- Q&A/Feedback (30 mins):
  - How do you use 'make'?
    - So it looks fpr a makefile in the current directory if there are no arguments for it?
  - What is a Makefile Rule?
    - ?not sure if the rules only go in the file or can also be arguments on the command line?
    - @ symbols
    - Interesting hearing about how they used to be called stanzas
  - Example Makefile
    - Is it required to indent?
      - Yes, it's how stanzas are separated
      - Must be tabs, not spaces
  - Example Makefile with a prerequisite
    - Running a makefile without prerequisites will run the first stanza
  - Example Makefile with a filename as a target
  - Example Makefile with real-world example
    - (Added mid presentation)
    - History of make to compile up-to-date C code
    - What does up-to-date really mean?
      - Timestamp of files
      - Not taking advantage of hash, contents are not compared
  - Example Makefile with a chain of prerequisites
    - make -n to see what will happen
      - It ALSO shows you comments, very helpful for keeping track / troubleshooting

- - - Example Makefile with a variable
    - Example Makefile with an external variable
    - What is 'make', really?

Plan next workshop (10 mins)
- go to workshop proposals ([mcp-369](#)), follow the instructions there, replace this bullet point with the link to the new doc