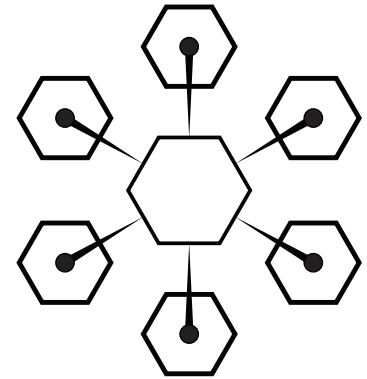


# MAKEDIS



COMS 4115, Spring 2012

Team  $e^{2\pi i}$

# Participating Gurus

David Benedetto, Language Expert Guru

Matthew Piziak, Systems Architecture Guru

Stephen Pratt, Verification / Validation Guru

Aryeh Primus, Project Manager in Charge Guru

Michael Reed, Systems Integration Guru

# Acute Build Paralysis



# Acute Build Paralysis

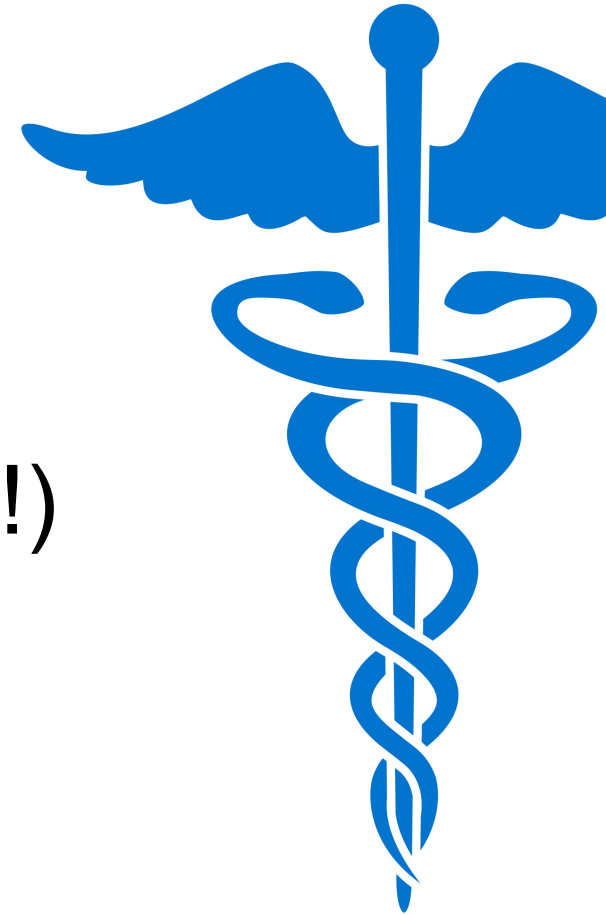
(Wait-my-code's-compilingitis!)



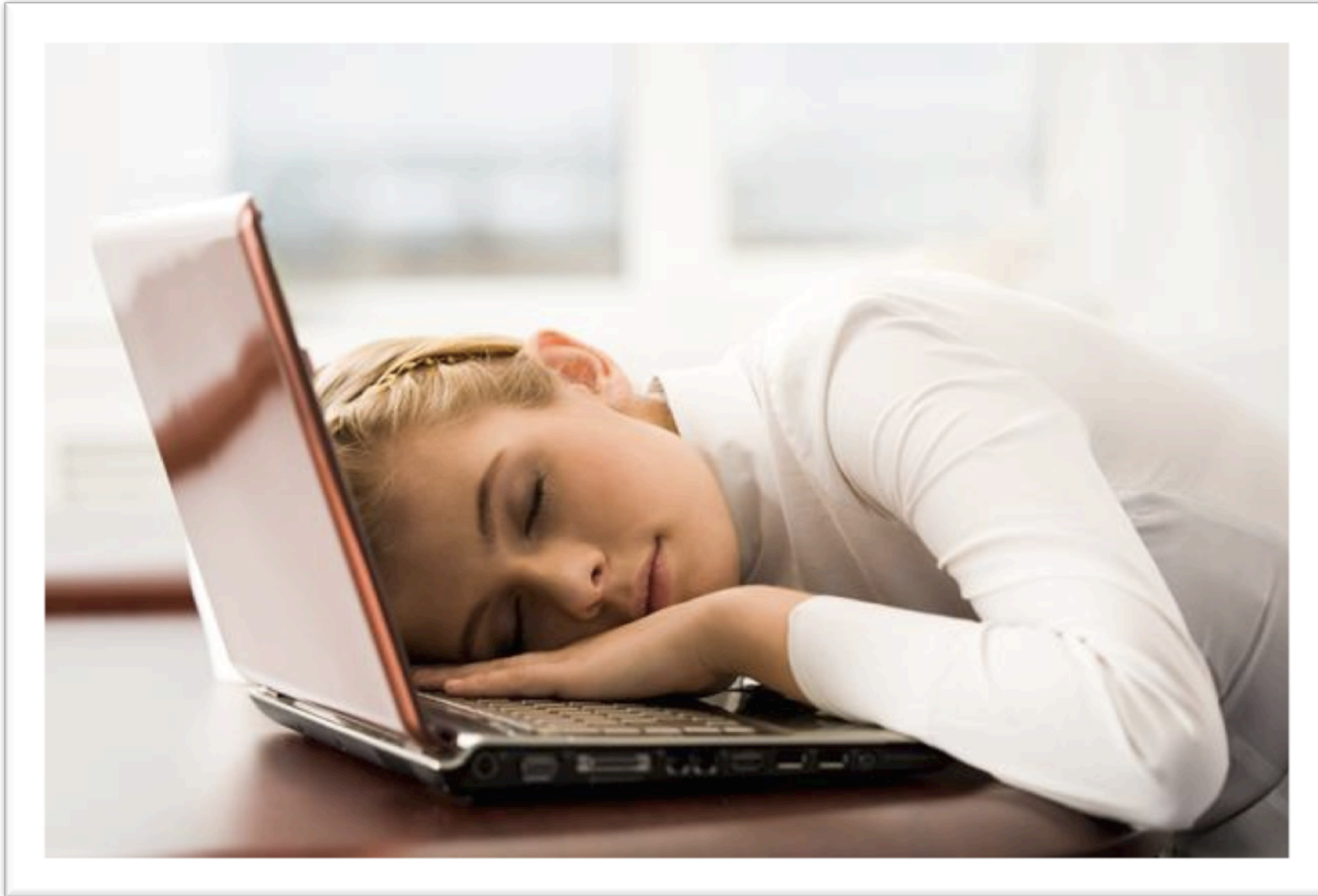


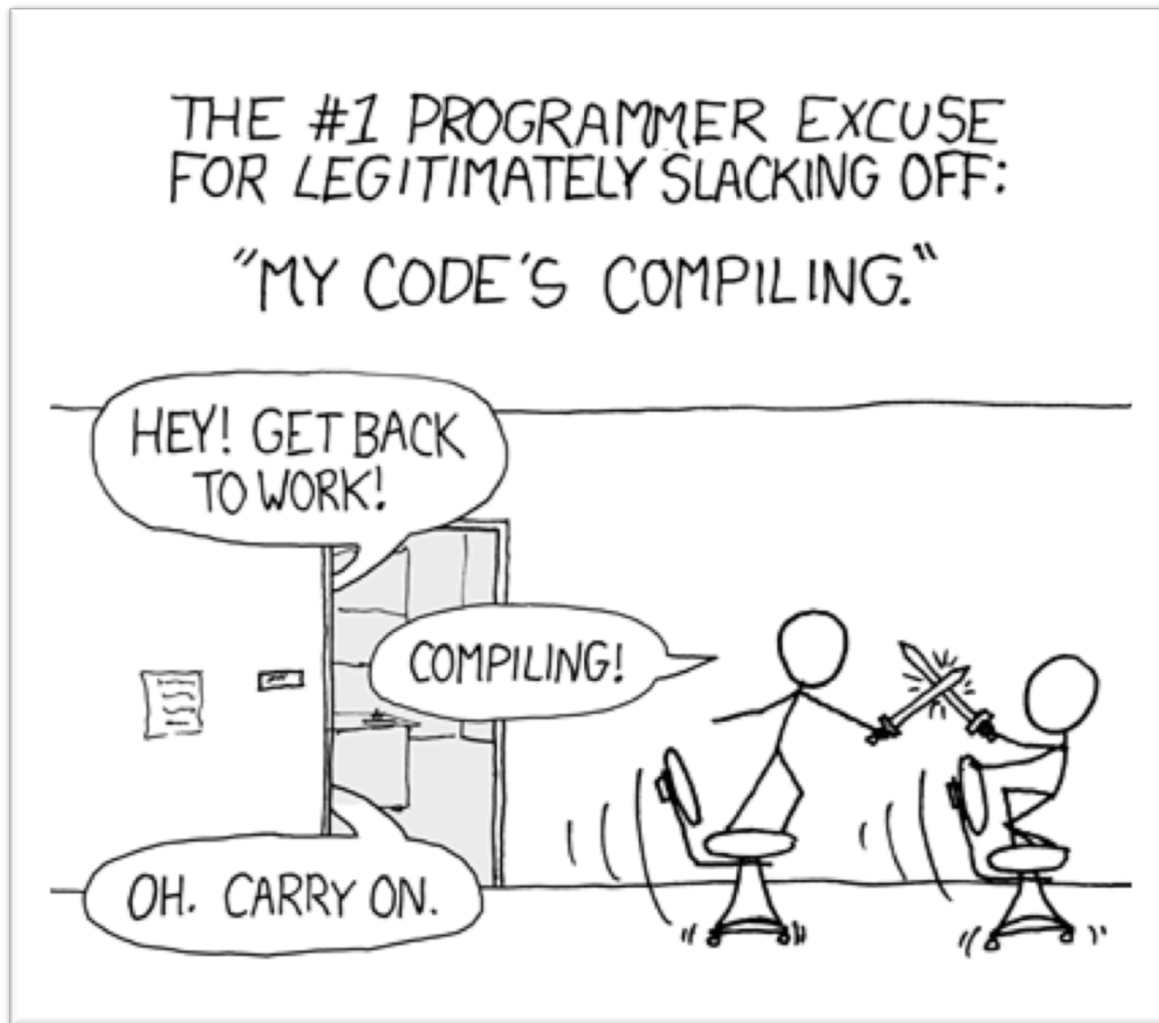
# Acute Build Paralysis

(Wait-my-code's-compilingitis!)

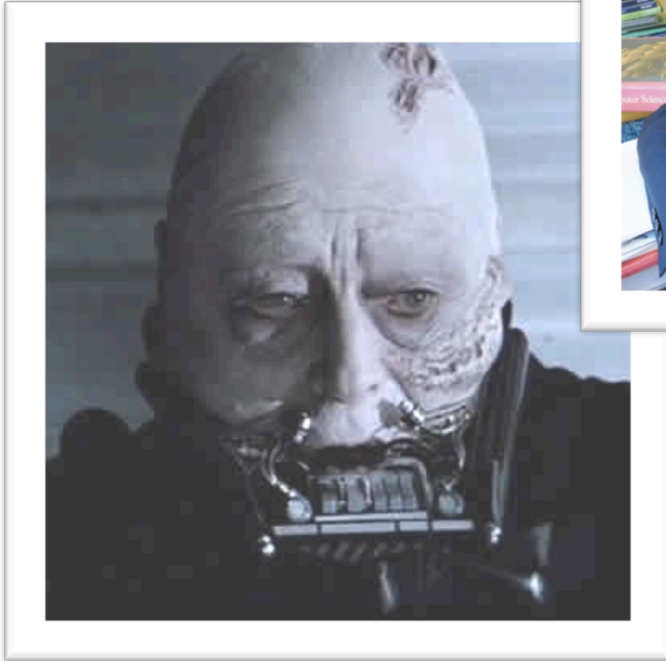


# Drowsiness





# Sudden Aging



# There is Hope

# MAKEDIS

# MAKEDIS

*“Making your code...  
...and your day!”*



**MAKE**  
**MAKE**

# Modern Build Environment MAKE DIS





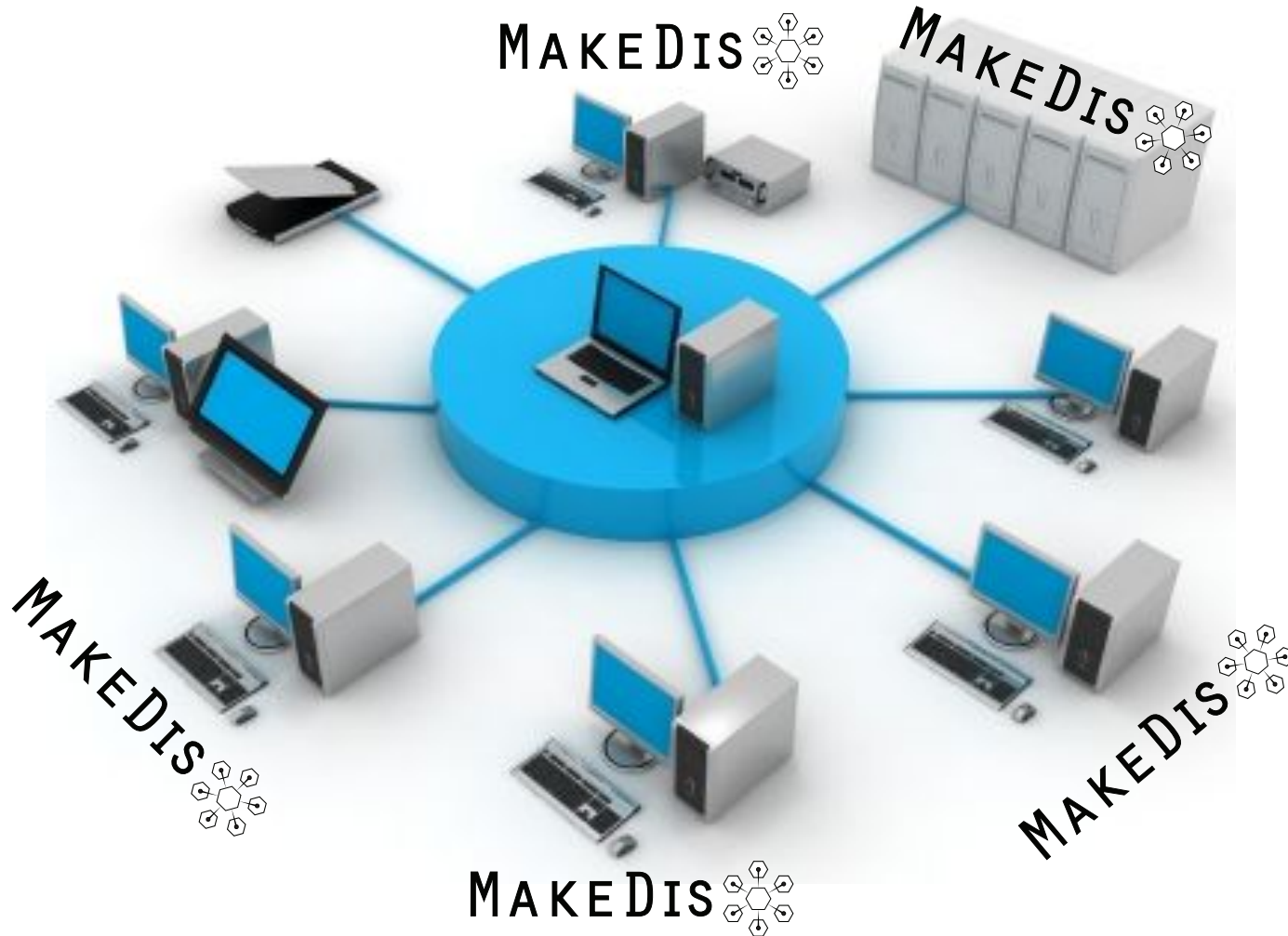
# Old Solution Doesn't Fit

MAKEDIS 



# MAKE





## Header Block

- Modularization of MakeDis files
- Declaration of Variables
- Definition of Build Settings

## Network Block

- Describes resources that may be available during build

## Target Block

- Breaks build into unit parts
- Designates inter-unit dependencies
- Provides instructions for constructing each unit

## Header Block

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```
## hw08-cs3157.mdis
## authored by the MakeDis team

include my_network.mdis
include mytest_suite.mdis

gccv = "gcc-4.1.3"
cflags = "-Wall"

global_vars {
    all_err_to_console=true
}
```

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}
```

## Network Block

- Describes resources that may be available during build

```
network {
  drone riga {
    access_id ssh("sdp2128@riga")
  }
  drone zagreb {
    access_id ssh("sdp2128@zagreb")
  }
}
```

## Network Block

- Describes resources that may be available during build

```
network {
  drone riga {
    access_id ssh("sdp2128@riga")
  }
  drone zagreb {
    access_id ssh("sdp2128@zagreb")
  }
}
```



## Target Block

- Breaks build into unit parts
- Designates inter-unit dependencies
- Provides instructions for constructing each unit

```
target list_tester_exec { ... }
```

```
target list_tester.o { ... }
```

```
target lib_linked_list.a { ... }
```

## Target Block

- Breaks build into unit parts
- Designates inter-unit dependencies
- Provides instructions for constructing each unit

```
target list_tester_exec { ... }
```

```
target list_tester.o { ... }
```

```
target lib_linked_list.a { ... }
```

## Target Block

- Breaks build into unit parts
- Designates inter-unit dependencies
- Provides instructions for constructing each unit

```
target list_tester_exec {  
  
    depend {  
        t: list_tester_obj_file.o  
        t: linked_list.a  
    }  
  
    .  
    .  
    .  
}
```

## Target Block

- Breaks build into unit parts
- Designates inter-unit dependencies
- Provides instructions for constructing each unit

```
target list_tester_exec {  
    . . .  
  
    recipe {  
        run_shell_command("gcc !(CFLAGS) -o list_tester_exec  
            list_tester.o -l list_tester")  
    }  
  
    . . .  
}
```

## Header Block

- Modularization of MakeDis files
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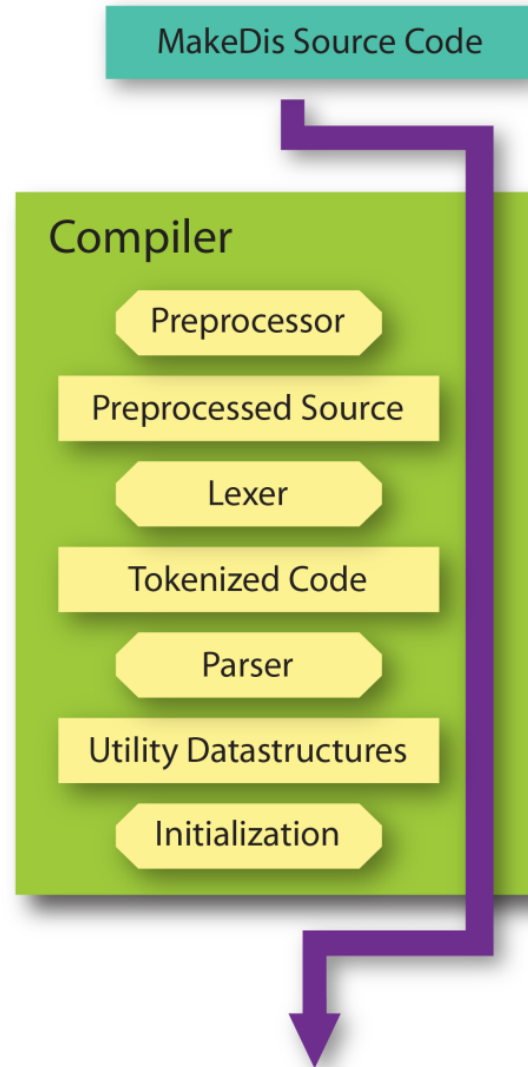
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# The JIT Compiler

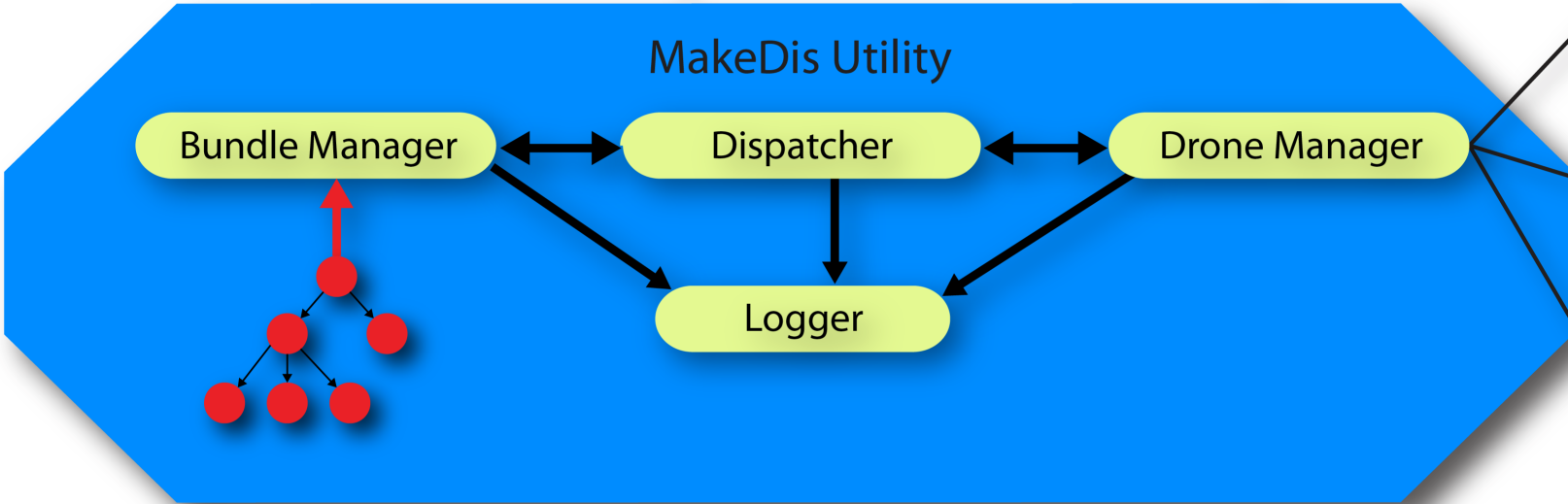


# Utility Architecture



Compiler

Prerequisite Build Files




Compiled Build



**FFmpeg** is a complete, cross-platform solution to record, convert and stream audio and video.



## MD Sunflower

Growing builds with the power of MAKEDIS 

With MD Sunflower, you can volunteer your computational resources to help build open source projects. Through the power of the MakeDis distributed build language and utility, MD Sunflower invites everyone to participate in the creation of free software, making the world a brighter place for open source developers.

If you'd like to sign up to help build this project, please take a moment to fill out the form below.

### This Project: CyanogenMod

"CyanogenMod (pronounced sigh-AN-uh-jen-mod), is a customized, aftermarket firmware distribution for several Android devices (See above for supported devices & how to install CyanogenMod on said devices). Based on the Android Open Source Project, CyanogenMod is designed to increase performance and reliability over Android-based ROMs released by vendors and carriers such as Google, T-Mobile, HTC, etc. CyanogenMod also offers a variety of features & enhancements that are not currently found in these versions of Android."



### Help Build

SSH Login String

Name / Organization

Additional Information



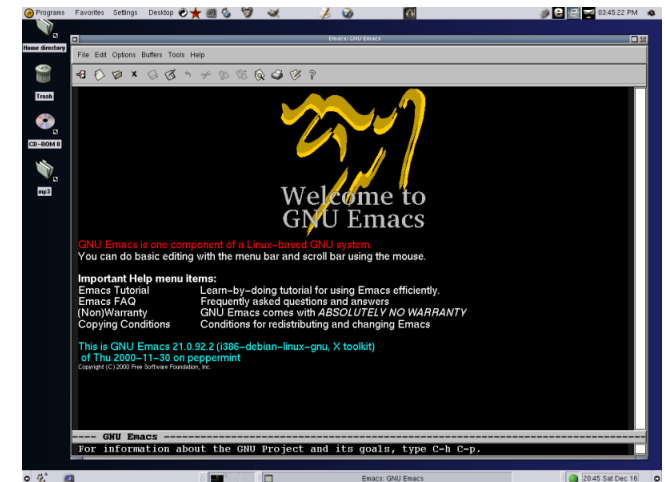
Volunteer



# Technologies Used



# LATEX



## Start Early



## Iterate



## Automate

## Communicate



# Talk to your Doctor

MAKE DIS 

