## **Contributors**

- Marcial Cabrera was the main developer in Part 1 of this assignment. However, Cristian Cepeda was jumping in and out since his main focus was on finishing Part 2.
- a. Can run single foreground command



b. Can simultaneously run multiple foreground commands (separated by ;)

```
Cabrera, Cepeda > /bin/ls; /bin/cat myfile
Makefile myfile shell.c shell.o
README.md shell shell.h

string = I'm a string;
hello World

//Marcial and Cristian HW2
Cabrera, Cepeda > |
```

c. Can run single background command

```
part1 — sleep → shell — 80×24

Cabrera, Cepeda > /bin/sleep 5 &
PID: 35838

Cabrera, Cepeda > ■
```

d. Can run multiple background commands (either on the same command line or separate command lines).

```
Cabrera, Cepeda > /bin/sleep 5 &; /bin/sleep 10 &
PID: 35844
PID: 35845
Cabrera, Cepeda >
```

e. Can run mixed foreground and background commands:

```
part1 — sleep → shell — 80×24

Cabrera, Cepeda > /bin/ls; /bin/sleep 5 &; /bin/sleep 100 &; /bin/cat myfile Makefile myfile shell.c shell.c shell.o

README.md shell shell.h

PID: 35852

PID: 35853

string = I'm a string;

hello World

//Marcial and Cristian HW2

Cabrera, Cepeda > ■
```

f. Shell terminates upon completion (quit and Ctrl-D), after all running programs end:

```
cabrera, Cepeda > sleep 10 & PID: 35870
Cabrera, Cepeda > quit
```

Waiting for the async call to finish

```
Cabrera, Cepeda > sleep 10 & PID: 35870
Cabrera, Cepeda > quit
$ |
```

g. Error handling: 5%

```
part1 — shell — 80×24

Cabrera, Cepeda > lslsl
exec failed: No such file or directory

Cabrera, Cepeda > [
```