Design Plan: Fibonacci

Jeremiah Katen: jereack@gmail.com Ewen MacGregor: inodiomac@gmail.com

April 2021

1 Project Summary

The Fibonacci project is an x86 Assembly Program written using Intel syntax. The purpose of the program is receive a positive integer 'n' as input and print the n^{th} Fibonacci number in hexadecimal.

2 Significant Functions

Arguments - Validate 'n' and any feature options used.

(default range for n is 0 - 100)

Main Loop - Iterates through Fibonacci numbers until $\mbox{'}n\mbox{'}$ is reached.

Next Fib - Calculates the next Fibonacci number.

Print - Prints the n^{th} Fibonacci number.

(One Label for each output variant?)

3 Milestones

- 1. Calculate Fibonacci numbers
- 2. Print Successfully
- 3. Loop until 'n'
- 4. Features
 - (a) -d: base 10 output
 - (b) -o: base 8 output
 - (c) Extend range to 0 300
 - (d) Pull n from standard input
 - (e) LaTeX documentation
 - (f) Man Page