

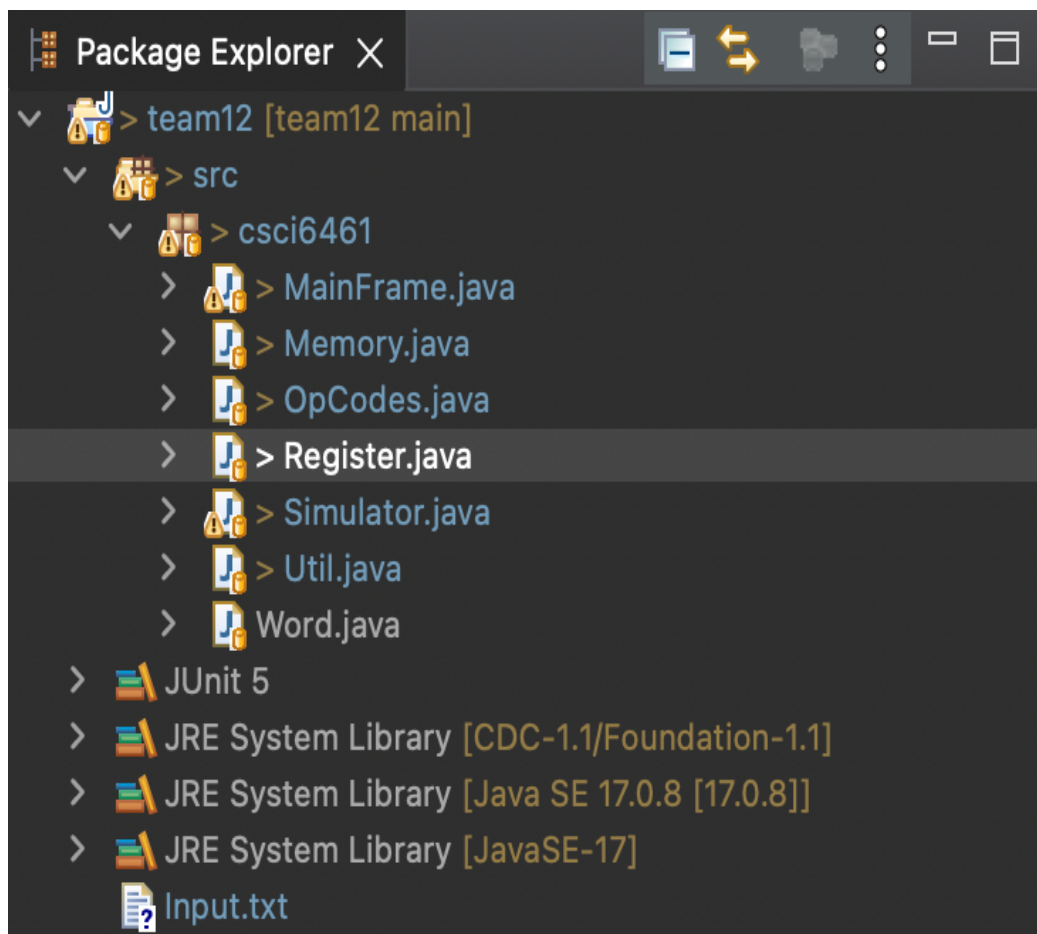
# CSCI 6461 Computer System Architecture

## Project Part 2 Design Notes

### Team 12

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## Classes



## **MainFrame.java**

This is the class that contains all methods to update the UI. It has "main()" which is the starting point for the program to start its execution.

## **Simulator.java**

This class has methods that perform operations like Load, Store, Fetch, Decode and moves data between registers and memory. In this phase we have implemented few new functions for taking an input file from the user which contains some "Instructions" and converting them to hexadecimal strings.

## **Memory.java**

This class represents the memory of CISC simulator with 4096 words. It contains methods used by "Simulator" class for reading and writing the contents.

## **Util.java**

This is a general-purpose utility class to implement word conversions. It has various functions that can be used for converting an input string from one format to other. (e.g., int->hex, int->bitSet etc.)

## **Word.java**

This class represents a word in a simulator that holds a 16-bit binary value.

## **Register.java**

This class represents the register in a computer system that can hold a binary value and it returns the size of the register.

## **OpCodes.java**

The opcodes for the simulator have been defined in this class.

UI

GPR 0

0000000000000000

LD

GPR 1

0000000000000000

LD

GPR 2

0000000000000000

LD

GPR 3

0000000000000000

LD

IXR 1

0000000000000000

LD

IXR 2

0000000000000000

LD

IXR 3

0000000000000000

LD

PC

000000000000

LD

MAR

000000000000

LD

MBR

0000000000000000

LD

IR

0000000000000000

MFR

0000

Priviledged

0

CC

0000

LD

Load

Store

INIT

SS

Run

Clear

InputFile

Input