Contents

Notes

I am getting married this week and will be gone for both classes. I provide two homework assignments and two videos on the class material. Watch the videos and complete the homework, the due date will be extended into next week for those who need assistance.

Subjects

The below two subjects will fulfil your lectures for this week, please treat the articles and videos as lectures.

Software life cycle:

articles:
https://www.geeksforgeeks.org/software-development-life-cycle-sdlc/
videos:
https://www.youtube.com/watch?v=8eVXTyIZ1Hs

1. Do some research on Waterfall software design, how does it work?
2. Do some research on Agile software methedology, what is it?

Procedural programming vs OOP programming

article:
https://www.geeksforgeeks.org/differences-between-procedural-and-object-oriented-programming/
https://hackr.io/blog/procedural-programming

videos:
This next video is not useful to us after time: **2:53**. however functional programming is amazing.
https://www.youtube.com/watch?v=B5O52_w-4Zg

Plan for the week

Please read the articles above, and watch the videos. There will be some rather general homework due on that material. This should be rather simple and quick assignment, namely a paper of only several pages.

Nomenclature

Σ l - is the *sumation* of the set l, this means that it takes each element of all and preforms the addition operation on them sequentially

$s.t$ or : - read “such that”

$\forall$ x $\in \mathbb{Z}$ - read “for all x in $\mathbb{Z}$”, denotes iteration over all indices of $\mathbb{Z}$

A $\longleftarrow$ B - denoting a binding where A will represent the value of B

A $\longrightarrow$ B - read A **implies** B, denoting the that the statement A being true implies that B is also true

[ ] - denoting a set

$\mathbb{Z}$ - set of all integers (real numbers or their negatives)

$\mathbb{R}$ - set of all real numbers (rational numbers/irrational numbers, including fractions and their negatives)

i $\in$ I - denotes that i is an element of the set I