25/02
Thurs.

# LOG-1 (Week-1)

- Bradley Anderson:
  - Tutor
  - Last year of Soft. Engg.

- Darcy Blackman.
  - 2nd year
  - Electrical Engg.
  - Hobbies: Soccer

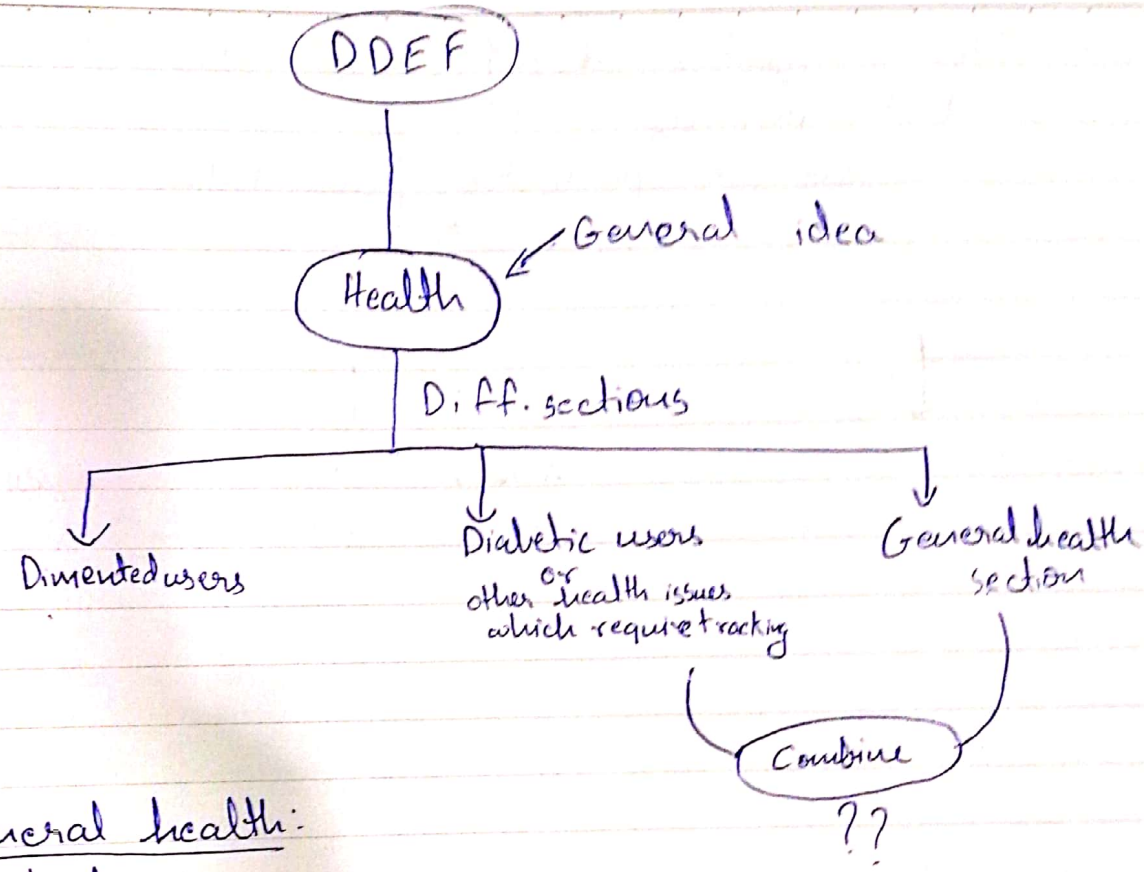
- Daniel
  - 1st year Soft. Engg.
  - Hobbies: Racing, Owns mitsubishi

- Mark Chan:
  - Electrical Engg.
  - Hobbies: Racing,

- Wei Lei:
  - 1st Softwo.
  - Blew up dus father's engine

- Ideas:
  - Dementia tracker + Diabetes monitoring + fitness tracking
  - ~~Suggesting people ideas based of~~
  - Military vitality tracking

Elected idea
→ DDEF




→ General health:

- Diet planning
- BMI index reviewing ~~(Manually provided)~~ (Manually provided)
- Heart rate monitoring (recording data for 1 month, alerting user/carer if notice anomaly in ~~the~~ gathered data)
- Optional: (For serious health issue monitoring)
  - i) Keep a record of health related issues (eg: Blood pressure, sugar level)
  - ii) ~~Give quick~~ If data is unusually high (eg: high bp, very low sugar):
    - Give quick remedy (food, ~~medicines~~)
      AND
    - Give option to get an appointment from specialists near you. (or that disease)

- Monitor sleep cycle & give time duration for each sleep cycle

→ Dimentia:

- Alert cares once Dimented users phone or smartwatch out of a fixed radius of the carers smartphone or smartwatch (Automatically starts tracking)

- Tutor suggested to add these in:
  - Data privacy
  - Timeline for production and testing.

3/04
Thurs

# WEEK-2 (Log)
## SDLC

→ Analysis phase

- Requirements:
  - ~~saved~~ Common data

- Went through the analysis phase ideas which might have been missed out previous week.
- More of a software central product.
- ~~Checkout~~ Bradly mentioned to look at the Functional & non-functional requirements
- ~~So~~ Had set up the timelines to make the programms
- Came with a new idea of making an email API to send monthly updates to ~~the~~ a carer or personal ~~patient~~ doctor
- Discussed about the various issues of different Prototypes;

i) ~~Started~~ Daisy raised some good points for why it should be spiral. (certain risks regarding the real suggestion)

ii) Prototype might be a good idea - since would require a lot of input from customers

iii) Ended up with incremental since can break the application to bits. And ~~application~~ certain features can be added later if needed. Can update the app based on costumer ~~input~~ review

BC

The UI needs to simple and interactive

# WEEK-3 (Log)

Task - 1:

→ Decided team leader using random no. gener.

→ Ben got chosen (Didn't oppose the decision at all) which shows confide

→ ~~Made the~~ Got the board all set up.

→ Made decision tree, leading to specific charac you might have

→ Tasks assigned:
- Create flowchart and share access
- Add in the rounded elements

Questions:

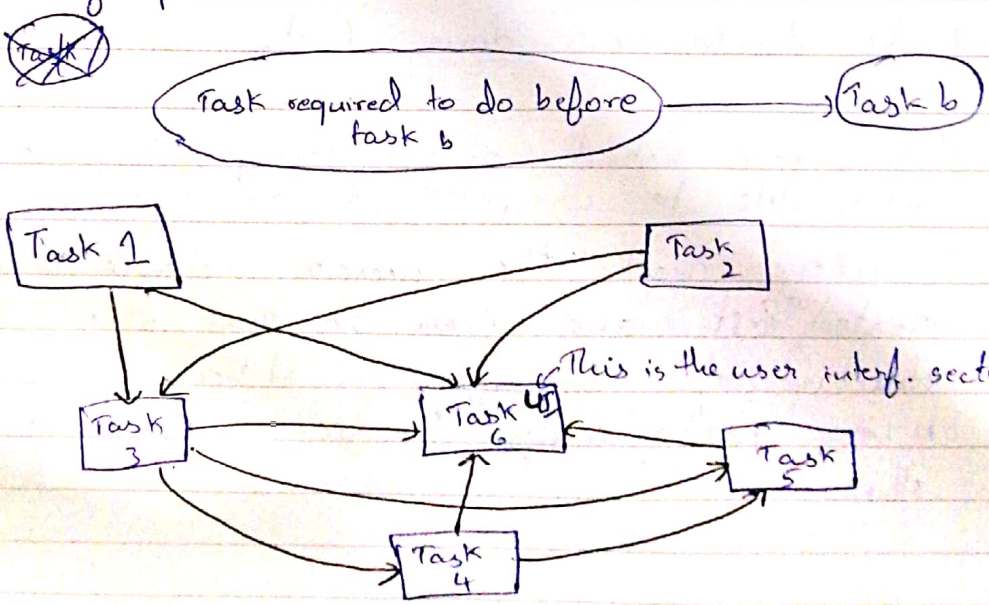
- Diamond elements were required first befor the arrows were made
- Next time we could collectively talk about what tasks should be done first, gives a proper structure.
- ✗ No, one asked about completing it everyone were able to complete it on time
- I believe that the question elements could have been started with first and ~~then~~ so that the structure of the flowchart been initialized & then ~~alternatively~~ correspondingly go from ~~the~~ one task to the other.

Bradley. anders @ eng. stu. au

IBC

→ Task-2:

- Each program product has two phases:
  i) Design of program
  ii) Making of the prog.
- Before each programing task we have few days to come for design (will be reviewed & modified)
  - The time for design < time for making prog.
- The program will be made in sprint ~~week~~ sess.
- Assumed that we have a team of two. (So that each ~~we~~ sprint sess. two team making one prod. each)
- Task been listed in order of doing first.
- Tasks ~~directed~~ dates have be decided based on following dependancy graph:



# WEEK-4 (SGTA)

## Working with Github:

- Setting up config. for github
- Had a doubt about repo. name (should it it be week
  - Bradley cleared that up.
- Made priv. repo.
- Done with copying git repo. using - git clone url
- Created text file, used git add * to get to staging phase, :)
- Did same with python file
- Modified python file, typed ~~wrote~~ necessary codes in and
- Pepper (asked in prac.)
  - First cloned my ~~local~~ dir. to an existing repo. Then for adding any file or for any changes;
    ~~git status~~ i) is git add */the files modif.
    ii) git commit -m "mes."
    iii) git push (push branches ordata to rem repo)
    Faced same issue while logging in after every push
  - Need to be careful if someone is using the ~~uncpdated~~ unupdated version of files and then try pushing their own modified version.

=> Working & figuring code in Jupyter:

- Section 1:
  columns: • 4 sensors
  • 2 Devices for each (Accel. & Gyr.)
  • 4 × 2 = 8
  • last column : which activity is active
  • each column : (except last)
  • represents reading of x/y/z axis of the accel. or gyros. sensor for each device

- ~~Section 2~~

5 x 3
4 D

# Week 5 _ Pract. (Log book)

~~Dataset~~ Everyone set up their accounts on Trello and Github and Google drive for the upcoming tasks.

* Trello & github ✓
* ~~group~~ private p.

- I (Omar) got assigned as the leader through group discussion.

- Assignment of tasks:
  1) Ben - Creates the github repository.
  2) Daniel - Created the Google drive file.
  3) Mark - Created Trello board.

- After every invite was sent and every one accepted them, double checked again to make sure everyone was at the same page.

- ~~After~~ Decided to let Darcy type in the comments (while sharing his screens) ~~3 tasks~~ 3 challenges after his

concensus:

- Collaboratively answered all challenges till task 3 & 4.

- Darcy commited & pushed allowing Daniel to do the last bonus task.

- Easily answered the 1st & 2nd question, but the last question on * what rows & column of the confusion matrix signify was a bit more challenging.

- After finishing 3 questions Daniel pushed the codes and we called tutor (Bradley) for review.

- Bradley gave a few feedbacks for the windows questioning mentioning what each colum signify in feature - window.
  (i.e. min, max & mean for each axis of acc. or gyr. along with Label)

# WEEK-6 (LOG)

→ Bradley pointed out:

- Line 119, Remove the backspace

- Downloaded txt and Jupyter notebook to push into the remote directory.

- Since our group was a group of 5, didn't get a particular task to do. Decided to try to do ~~all question~~ as many questions as possible before the discussion.

Ch 2.1: # TP = 0

# TP+FP = 0

∴ ~~Acc = 0/12 = 0~~ Precision = 0

- # Learnt that while measuring the ~~precision~~ accuracy of ~~a corp~~ for an activity (i.e. precision in confusion matrix) the ^ Negatives are ignored.

- Precision: For all prediction for a certain activity 58:26 how many are correct.
(i.e., it only deals with the positives)

| | -ve | +ve |
|---|---|---|
| -ve | TN | FP |
| +ve | FN | TP |

→ Precision only deals with these

$$Prec = \frac{TP}{TP+FP}$$

- Since members preferred doing tasks individually, ~~&~~ there was a slight issue as to how members could push and other member could pull without getting their answers erased.

- One suggestion was sending answer to one person who could push everything. Was discarded since ~~what~~ while checking the commit history conveners wouldn't be able to assess who did what.

- Solution: Everyone saved answers before pulling in a txt file and pasted them in after pulling and before pushing

IBC

Bradley reviewed our work:

i) One answer regarding the poor accuracy of the model was wrong, ~~regarding~~ to which he explained the reason that the model had very less data to train on for some activi-ties.