Members
1. Srilakshmi Shajin (Group 1)
2. Hari Shankar (Group 1)
3. Ann mary Tom (Group 2)
4. Vishwesher S (Group 2)
5. Jishnu M Kumar (Group 3)
6. Ashok Mathew Reji (Group 3)
7. Srilakshmi S R
8. Sethulakshmi Santhosh
9. M Devika
10. Aishwariya K
11. Avani F
12. Govind S Nair

Mentors
1. Akhil S Kumar
2. Gautham Krishna
3. N R Niranjan
4. Akash Harikumar
5. V G Uday Krishnan
6. Advait Suresh
7. Gopi krishna

Weekend tasks(Saturday & Sunday)
- Start learning DSA
  - Resources
    - https://www.programiz.com/dsa
- Solve 4-5 CP problems (CodeChef/HackerRank/LeetCode)

Weekdays tasks(Monday-Thursday)
- Learn basics of HTML by practicing
  - Resources (Learn from anyone)

- - - https://www.w3schools.com/html/
    - https://www.geeksforgeeks.org/html/
  - ○ Folder Structure
    - Create a new folder HTML-Basics
    - Name the html files as [topic_you_learn].html (avoid adding [ ] brackets)
    - Create a new repository inside github by clicking New-Repository, name it the same like the folder name and create it.
    - Initialize git inside the HTML-Basics folder using CMD by dragging the tab from below, in the VS CODE (If it is a powershell delete it and click + icon to start a new cmd prompt). Command: git init
    - Connect the remote repository with the local repository. Command: git remote add origin <link>
    - Once you complete each tutorials use the command git add <file-name>
    - Then commit using the command git commit -m 'any message'
    - This step has to be done only for the first time, skip for the next time. Use the command git branch -m main (to rename the branch)
    - Finally use command git push origin main
    - This procedure has to be followed each time when you create a new file for each tutorial you do.
- ● Learn basics of CSS
  - ○ Resources
    - https://www.w3schools.com/css/
  - ○ Folder Structure
    - Same like previous
- ● Learn basics of JavaScript
  - ○ Resources
    - https://www.w3schools.com/js/
  - ○ Folder Structure
    - Same like previous

Projects

- BMI Calculator
- Mark List generator (Certificate)
- Weather App
- Guess the color app
- Stop watch
- URL shortener
- Todo list
- Guess the word
- Blog app
- Student Registration App
- Background color changer on click
- Counter project

If you want to do some projects on your own you can do so, but share your status with the mentors.

Career Divergence
- Domains
    - Web Development/Mobile App Development
    - AI/ML
    - Cyber Security
    - Cloud Computing
    - Block Chain

Web Development/Mobile App Development
- Frontend
    - Learn different frameworks
        - Bootstrap
        - ReactJS
        - Gatsby
        - NextJS
        - Angular
        - Vue
        - Tailwind/Saas(Styling purpose)
        - React Native (App dev)
        - Flutter (App dev)
- Backend

- ○ Learn different frameworks
    - ■ Django
    - ■ Flask
    - ■ Laravel
    - ■ ExpressJS
    - ■ Dart (App dev)
    - ■ Kotlin (App dev)
    - ■ Swift (To build Apple apps)
- API's
    - ○ GraphQL
    - ○ Rest Api
- Find a use case and do some projects of your choice

AI/ML
- Learn a programming language (Python preferred)
- Learn Sklearn
    - ○ Resources
        - ■ https://www.tutorialspoint.com/scikit_learn/index.htm
- Linear Algebra
    - ○ Resources
        - ■ https://www.kashishkumar.com/linear-algebra-for-machine-learning-using-python/#:~:text=Linear%20algebra%20provides%20a%20system,Analysis%2C%20Neural%20Networks%2C%20etc.
- Statistics
    - ○ Resources
        - ■ https://www.geeksforgeeks.org/statistics-with-python/
- Learn ML algorithms
    - ○ Gradient Descent
    - ○ Slope
    - ○ Supervised & Unsupervised learning
    - ○ Reinforcement learning
    - ○ Linear Regression
    - ○ Multivariable linear regression
    - ○ Clustering
- Learn other ML Libraries
    - ○ Numpy

- ○ Pandas
- Create some interesting projects
- To host your ML models use your web development skills and learn how to use streamlit

<u>HACKATHONS</u>

Try to do at least 1 hackathon per month.

- MLH
- Devpost
- HackerEarth

Happy Learning 🙂

Regards,
Akhil S Kumar