Muhammad Hammad

Contact: +923126932027 **Mail:** m.hammad_19784@khi.iba.edu.pk **GitHub:** hammad-m

EDUCATION

BS Computer Science, Institute of Business Administration (IBA) Karachi   (08/2019 – 6/2023)

- **Honors & Awards**: NTHP scholar-selected among the **top 23** students from all over Pakistan for four years fully funded scholarship at IBA Karachi

PROJECTS

Interactive To-Do List App in Flutter:
- Created a complete task management app using several flutter widgets that gives easy solution to manage daily tasks.
- Used provider for state management and firebase for saving data to present better user experience.

Hangry:
- Hangry is an app I am creating in collaboration with my group members for our final project in a flutter course at IBA.
- We are providing a unique way of ordering food in restaurants. The process includes scanning the QR code available on each table of the restaurant.
- As people scan the same QR, they all get access to a unified interactive cart where each friend can add his own items which will be visible to every other person who scans the same QR, aiming to ease the ordering process for customers.

VM Architecture, Process and Memory Management, CPU Scheduling:
- Spearheaded a group of 4 in which we designed Virtual Machine Architecture using JAVA.
- Implemented **Registers, Instruction Set, Instruction Format, Machine execution cycle, Process Control Block, Program Loading, Data loading, Code loading, Program Execution, Program Termination** and **256 byte sized Memory Paging.**

NLP Analysis of Content on Google:
- Generated a script that can search and pick first 50 links(can be fed a custom number) from Google for any keyword. It then filters the content leaving only the useful content.
- Its applications include **POS tagging, entity tagging, finding common words and phrases in content and headings, visualizing all the data**, **connecting found entities** like nodes in a graph and finding the most important words using **betweenness centrality** securing useful insights and making quick NLP analyses easier.

Text to Latex:
- Developed a text to latex converter with the functionality of parsing 13 different types of tex sextions from plain text making writing basic PDFs through latex easy.

Breadth Depth Search:
- Effeciently merged 2 famous algorithms (**BFS** and **DFS**) to develop a new algorithm.
- It starts while performing BFS and looks for branches at each node. If any node has more than "b" branches; it shifts to DFS while having the tendency to perform quicker searches.

WORK EXPERIENCE

Findmyadventure.pk   (07/2021)-(08/2021)

SEO Intern
- Initiated data gathering from the web to plan the content for their site (more than 120 pages)
- Executed analyses and audits on gathered data using different NLP tools and consolidated opportunities to rank higher and accelerate traffic by 10 times, doubling the revenue.

SKILLS

- Flutter
- Firebase
- MongoDB
- Java (OOP, DS)
- Python(AI and Data Science libraries)
- SQL
- Javascript
- MERN Stack
- Web Scraping
- SEO
- Trello/ Clickup

EXTRACURRICULAR ACHIEVEMENTS

KPMG Data Analytics Virual Experience Program
- Actively took part in KPMG's Virtual Experience program and succesfully completed the assigned tasks on given real world datasets.
- Carried a Data Quality Analysis and looked for opportunites to clean and tidy the raw data, then implemented the changes.