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| **LONDON METROPOLITAN UNIVERSITY**  **PROFESSIONAL WORK PLACEMENT**  **LEARNING LOG**  YOUR ID: **20048417**  YOUR NAME: **Bibek Niraula**  YOUR COURSE: **BSc (Hons)** **Computing**  YOUR MODULE: **Work Related Module (WRL)**  YOUR WRL TUTOR: **Manish Regmi**  PLACE OF WORK (Company Name): **Hunchha Digital Agency**  DATES OF ENTRIES IN LEARNING LOG:   |  |  |  |  | | --- | --- | --- | --- | | **S. N** | Start Date | End Date | Company Supervisor Signature | | Log 1 | 26thJune | 6th July |  | | Log 2 | 7th July | 17th July |  | | Log 3 | 18th July | 28th July |  | | Log 4 | 29th July | 8th August |  | | Log 5 | 9th August | 19th August |  | | Log 6 | 20th August | 2nd September |  | |

## LEARNING LOG 1

**For the period 26th June to 6th July**

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| **What have I done? (LO1, LO2, LO3, LO4, L06)**  At the beginning of our internship, we were introduced to the company's staff, supervisor, and HR, as well as to each other. During the orientation, we had a brief discussion about the internship procedure. We were informed that we would first undergo a ten-day training session, followed by a minor and a major project. This gave us a clear understanding of what was expected of us during our time at the company.  **(LO1) – Learn dart programming language.**  During the ten-day training, I gained expertise in using Flutter and Dart to create visually appealing mobile applications and learned about API integration, file structuring, and databases. One project involved implementing CRUD operations using Firebase's APIs, which taught me how to interact with external data sources. This project was completed in two days and helped me understand how APIs can be used to fetch, delete, update, and put data on the internet. The training also provided practice with mockAPI and laid a solid foundation for utilizing APIs and databases in mobile application development.  **(LO2) – Learn Flutter framework.**  After acquiring knowledge of Flutter and Dart programming languages, I was able to create a basic mobile application with screens and navigation for users. Learning about the Flutter framework and Dart programming language simplified the concept of mobile application development, enabling me to take on my next project that involved using Firebase as a database. In this project, I developed a user interface (UI) that listed users and their details, gaining an understanding of essential mobile application components such as screen navigation, app bars, and drawers. Through this experience, I was able to develop my skills in mobile application development while gaining practical experience in working with databases and user interfaces.  **(LO3) – Learn CRUD operations with API.**  The initial assignments of the three projects focused on utilizing APIs to conduct operations within the mobile app. As the first project was simply a practice assignment, I only had a fundamental understanding of performing CRUD operations with APIs. Initially, I lacked knowledge in using various data structures, algorithms, and logics to create programs that could accomplish specific tasks. However, I gained this knowledge and practical experience in my recent project, "Bolpatra," which is a typical Nepali application that required building a separate backend to store Bolpatra as PDF files and display it in the app. This project involved conducting CRUD operations with Bolpatra materials through APIs and support my understanding and practical use of APIs while developing skills in data structures, algorithms, and logics.  **(LO4) – Learn to integrate firebase for user authentication and database.**  While working on the "Bolpatra" project, I had to incorporate traditional authentication methods along with social media authentication, including Facebook and Google authentication. I was already adapted to utilizing Firebase for authentication and database storage in my Flutter projects as it provided a convenient solution for these functionalities. This simplified the process of implementing authentication and databases, allowing me to focus on other aspects of the project, such as building the user interface and integrating API functionality.  **(LO6) – Learn file management in project.**  We were instructed to follow a specific project file structure commonly used by Flutter developers during the ten-day training period. To aid our understanding of maintaining proper file structuring, our supervisor provided us with a sample "Foo" project. This proved to be a valuable resource in helping me learn about project management and organization. The success of my projects depended on my ability to maintain perfectly structured understandable code, which was made possible by good filing system. |
| **What I did well (refer to skills used)**  **Use of firebase database and data structures**  I got the chance to study and put different programming principles and approaches to use during the ten-day training period. I learned a lot about using various data structures and connecting them with the Firebase database via the projects I worked on. I also improved my programming logic abilities and learned about project management, UI design, and API integration. My programming abilities were put to good use throughout this training period, and it gave me a chance to develop them more in preparation for practical situations.  **Dart programming logic**  During the training phase, I was able to put my skills to use by using the programming principles I acquired in college, such as control flow statements and looping. A large amount of study was also necessary throughout the training period, which helped me develop both my research and programming skills. |
| **What I could improve on (i.e. skills I want to improve)**  **Integrate Backend**  After considering my skills, I concluded that while I'm capable at creating the frontend for different projects, I still need to grow my knowledge by discovering how to combine a Laravel backend with Firebase as a database. As a result, I will be able to develop sophisticated web apps that can effectively handle massive volumes of data and user requests. While Firebase is a dependable database management solution, Laravel is a popular PHP framework that gives powerful capabilities for creating cross - platform projects. I can create an effective backend that works well with the frontend and provides smooth user experiences by integrating them both. |
| **Action I can take to improve my skills and learning**  **Integrate Laravel backend in the project.**  **Goal:**  To integrate the Laravel backend with Flutter, by creating RESTful API endpoints in Laravel and use them to access data in Flutter using API authentication.  **Action:**  After completing the training phase, I have been assigned a minor project that requires me to incorporate a Laravel backend with MySQL as the database. To accomplish this, I will conduct research and enroll in some courses to gain knowledge about the fundamental concepts of MySQL and Laravel.  **Timing:**  By the 16th of July, 2022 |