淡江大學資工系－專題實驗記錄表

105.09.22 105學年度第1學期第1次系務會議討論通過

| 一、指導教授：陳建彰教授 | | | 二、組別： | | |
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| 三、日期：2022年10月14日 | | | 四、地點：教授家中 | | |
| 五、專題進度：  As the topic had been set, we started collecting all the data and references that relates to our research. These references will be the fundamental theories that lead our project. Moving on to the next step, our group will be discussing the functions that suit our research the most. | | | | | |
| 六、專題討論內容大綱：  Following the gathering of all references, we started to sort out the library and functions that we need. After a thorough discussion, we decided that the Mediapipe Pose Detection BlazePose Detector is the method that suits our project the best. The detector is inspired by the BlazeFace model that is used in Mediapipe Face Detection as a proxy for a person detector. It specifically predicts two fundamental virtual keypoints, rotation, and scale, that firmly define the center of the human body as a circle. The pose landmark model used is BlazePose GHUM 3D which predicts the location of 33 pose landmarks. Compared to the current pose model based on the COCO topology standard which only consists of 17 landmarks, the BlazePose is ideally suited for fitness applications since it precisely localizes more keypoints. BlazePose’s 33 human body keypoints are basically a superset of COCO, BlazeFace, and BlazePalm topologies. | | | | | |
| 七、評論與討論：  Mediapipe Pose Detection BlazePose Detector is the detector method that will be used for our research. It is proven to be accurate and suits fitness applications rather than another detector. For this purpose, our group believed that this detector complements our research since our topic is to verify the quality of the performed exercise. | | | | | |
| 六、出席學生：須簽到 | | | | | |
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實驗助教簽名：*、*指導教授簽名：

註1：每週之專題實驗紀錄表，每組每週需繳交1份，紀錄表內容字數不得少於250字。上傳後之實驗紀錄表由系辦助教審核。