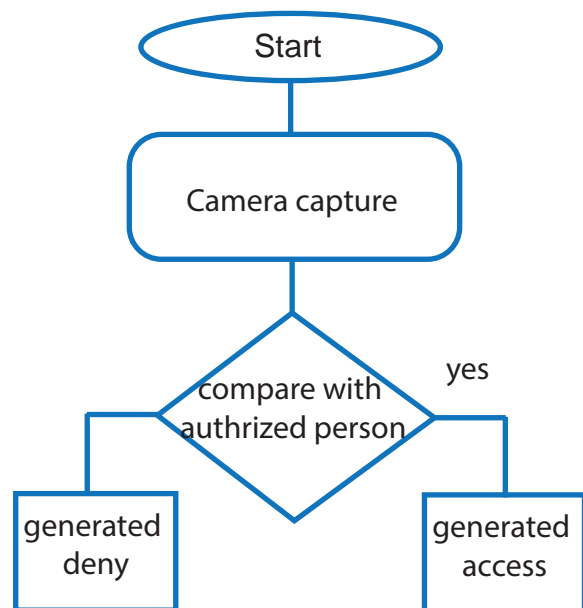# METHODOLOGY

- PyCharm was used as the development platform for the door system using face recognition.
- OpenCV and Dlib libraries were integrated for real-time face detection and matching against an authorized personnel database.
- This approach made the implementation of the face recognition method more efficient and effective.

```
          ┌──────────────┐
          (    Start     )
          └──────────────┘
                 │
          ┌──────────────┐
          │ Camera capture│
          └──────────────┘
                 │
             ╱         ╲         yes
           ◇ compare with ◇ ──────────┐
            ╲ authrized person ╱       │
             ╲         ╱               │
   ┌──────────┐              ┌──────────┐
   │ generated│              │ generated│
   │   deny   │              │  access  │
   └──────────┘              └──────────┘
```

Conturbution

With PyCharm's support for debugging and version control, it became easier to test and refine the face recognition algorithm, leading to a more reliable and accurate system. Overall, the use of PyCharm greatly contributed to the success of the door system using face recognition.