

Sozib Al Mamun

Embedded Software Engineer

Event Generate

All events generated from the server like enrolment & delete.

```
register_event(xQueueEventLogic);
```

By this function start rtoss task by this function

```
void event_generate(void *arg)
```

This function received server cmd and sent it to the faceRecognition task.

Face Enrolment

Enrolment person by cmd from server use **<cmdenrol> <name> <crc value> <endcmd>**

This format. Save enroll face in FATFS and then send face data to server after successfully sending face data delete it.

To save data in FATFS use this function:

```
void save_face_data(uint32_t person_id, const char* name, uint32_t image_width, uint32_t image_hight, const uint8_t* image_data);
```

Read face data from FATFS: search face directory if there is any face data or not. If the data is available in the face directory then read it and send it to the server and after successfully delete the data from the face directory.

Search Face data Function:

```
bool process_and_send_faces(const char* topic);
```

Helping function of this: after reading face data this sent by this function

```
bool imagesent(uint8_t* buff, uint16_t buffLen, uint8_t h, uint8_t w, char* name, uint16_t id, char* topic);
```

Image sending format:

First sent image info:

<imagelen> <image width> <image height> <person name> <person id> <total chunk>

Main image data:

<person id> <chunk no> <image data>.....

Show image in display at sending time:

Enrolment Delete

Sent this format from server <cmddl> <id> <crc> <cmdend>

event_generate()

This function sent cmd event to rtoss