

1. **Project Name:** Hebrew Sign Language Translator

2. **Members names:**

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3. **Functional requirements (Users needs):**

- Operational Requirement (High):
 - We need the phone camera to work in order to enable the openCV functionality, embedded inside the code. The camera will observe the person using Sign-Language and translate it to words to the user.
 - A comfortable UI for quick operations
 - User login page to different between Premium users and free users (requires an email account)
 - The system will need to be able to separate different signs.
 - A working phone camera
 - The application should be designed in a way which can allow recurrent training of the model (the more training, the better the results)
- Data Requirements (High):
 - Sign language database which will be composed of images and videos
 - Sign language knowledge
 - Once the model recognizes a sign, it needs to write the corresponding word to the screen
 - SQL database for keeping the users information (premium or free users)
 - A cloud where we can launch the app

4. **Non-Functional Requirements:**

- Constraints (Low):
 - A lack of time (we only have two months)
 - A lack of budgets
 - We don't have enough computers resources (hence we can't train a big model)
- Implementation (Medium):
 - Integration of the OpenCV library inside the app
 - SQL database
- Hardware constraints:
- Computational resources : won't be able to train a big model on our PC
- Solution Quality (Medium):
 - Performance requirements: We don't expect the performance of our app to be excellent because our resources are limited (memory, gpu, etc...) . the app will only contain basic hebrew words and letters.
 - Quality Attributes:
 - Credibility: we will try and make the model as reliable as possible, so the data will contain a limited amount of words **but** they will be fairly well trained. There is still a risk that the model won't be able to recognize the signs with 100% accuracy.

- **Security:** the login to app will be used through the google UI to make sure our client's information is properly secured (especially the premium users)
- **Maintability:** we will make our app an open-source, to allow others to train and test the model as well.