PROJECT PROPOSAL DESCRIPTION
SPRING 2023

Title* *Title of the project	Attendance tracker for AWS re/Start
Partner* *State the company name and the main contact info. *(Only for the senior project)*	Orange - AWS Contact: Mariem Turki - Head of Innovation @ Orange Tunisie mariem.turki@orange.com 50013651
Project Description & Design Process* *Overview of why you're doing this project + the series of steps that you will follow to come up with a solution to a problem.	To avoid doing the attendance every morning of the AWS re/Start Program, we would like to automate the check-in process for our AWS re/Start Cohorts. Taking attendance takes a lot of time for 30-40 learners Tardiness and early exits are allowed in the program so there can't be a fixed time to take attendance A badging solution exists but we do not have access to the data at the ODC level. **Proposed Solution:** Web Server: - Facial Recognition - Metadata extraction from image to determine time and location where the picture was taken - Detect who the learner is and mark him present if the location detected from the picture is at the ODC Admin Dashboard: - Cohort management module where the admin can add new cohorts, set a start/end date and location for the cohort - Learners onboarding module to assign learners to different cohorts - Upload of images on day one of the training for each learner, to be used for facial recognition - A detailed attendance report every day of the training (present/absent + check-in time) Mobile App or Client Interface: A simple interface where the learner can take a picture and submit it upon arrival to the ODC. Can be an app to install in one of our terminals or a web interface that every learner can access to on their phone
Target Customers	AWS re/Start Cohorts.

Project constraints	**Scope**	This project aims to streamline the time-consuming process of taking attendance, by using a system that can automatically detect learners' faces and extract the time and location from the image metadata. The system will then accurately mark the learners as present if they are located at the Orange ODC. This solution will eradicate the need for physical badge exchange and simplify administrative duties by generating daily attendance reports.
	Time	3.5 MONTHS
	Cost	UNDETERMINED: SINCE IT'S A SCHOOL PROJECT WE ARE PROVIDED WITH ALL THE EQUIPMENT NEEDED.
	Others	Prior Knowledge: Lack or deficiency of prior knowledge and experience regarding engineering design
Delimitations* *The characteristics that limit the scope and describe the boundaries of the study		
Limitations* *They are restrictions related to decisions made in the project *(With the professor)*	• BACKEND FOR FACIAL RECOGNITION WITH PYTHON. • API: NESTJS OR NODEJS. • FRONTEND: REACT, ANGULAR, DJANGO.	
Assumptions* *Any project factor that is considered to be true, real, or certain without empirical proof or demonstration.	N/A	
Standards* *Project standards are the rules and conventions governing the way in which a project will be conducted.	• IEEE/ISO/IEC P15288 - ISO/IEC/EEE Draft Standard - Systems and Software engineering -- System Life Cycle Processes. • IEEE 1008-1987 - IEEE Standard for Software Unit Testing	