**Web&Cloud Security + Distributed&Parallel Sys Security Project**

Web app that connects to a Javalin BE that encrypts or decrypts a .bmp image with AES in ecb/cbc mode and sends back to Frontend the image encrypted/decrypted.

Start the Frontend:

docker pull sebastianncraciun/frontend

docker run --name frontend -d -i -p 3000:3000 --network ism\_project --hostname frontend sebastianncraciun/frontend

docker exec -it frontend /bin/bash

Now, you are in the docker container, run these commands:

export NODE\_HOME=/opt/software/node-v18.18.0-linux-x64

export PATH=$NODE\_HOME/bin:$PATH

From the frontend container go to home/frontend directory and run:

node server.js

Start the Backend:

docker pull sebastianncraciun/backend

docker run --name frontend -d -i -p 8080:8080 --network ism\_project --hostname backend sebastianncraciun/backend

docker exec -it backend /bin/bash

Go to home/untitled and run:  
mvn clean package after installing maven:

* apt-get update
* apt-get install -y maven

now run:

java -jar target/backend-encrypt-1.0-SNAPSHOT.jar after adding JAVA\_HOME=/opt/software/jdk-17.0.2 to the PATH

How to use:

Upload a .bmp file to encrypt, select the mode (ecb/cbc), the AES key, you can use it for example:  
7G2xyyTWYY2ClnlsYitCUQ==

It will be downloaded automaticaly after it will be encrypted, and you can upload the encrypted version and select decrypt and the decrypted file will be downloaded.