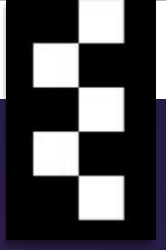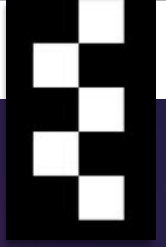# SSD Project Demonstration
CERN API

By
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CERN API

- ► Purpose: to store and access research documents on the Large-hadron collider at CERN.
- ► Users: CERN Researchers, Academics (students, tutors) and CERN Administrator.
- ► API developed using Django REST framework
  - ► Endpoints:
    - ► **Authentication**
    - ► **Registration**
    - ► **Documents**
    - ► **GDPR**
    - ► **Microservices**

Endpoint Features

Authentication	Registration	Documents
User Login: JSON Web Tokens (JWT) generated and used for authorisation on other endpoints. Token Refresh: To refresh token after 1hr elapses <u>JWT</u> ● JWTs are cryptographically signed; offering a secure way for client's identity to be verified. ● Faster response times as no database tables are used to store tokens.	● Register New User: Password validation (regex and 10k commonly used passwords) *Implementation of user roles in progress	● Create document ● List documents ● Fetch document (specific) ● Update document ● Delete document Additional Features: ➔ Pagination ➔ Filtering *Implementation of user privileges in progress

Endpoint Features
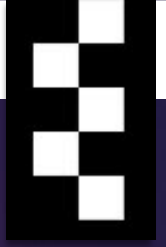
GDPR	Microservices
GDPR Compliant features: ● Data Access Request ● Data Erasure Request	Connected to an existing CERN api to search for documents.

Assumptions

User registration goes through an approval process to ensure that roles are correctly assigned to the right people.