# Cloud-based file storage system

Fu Ziyang SM3800011







Seamless file storage for user

**Admin - User roles** 

**Dockerized deployment** 

**Platform monitoring** 

security measures



**Extensive set of built-in features** 





# **Security measures**







User authentication through email server



Enforce robust passwords through passwords etiquette



Data security through server-side encryption







Two-factors Authentication



Secure clients-server communication





**Security measures** 

**Monitoring and Testing** 



#### **Monitoring**





### **Testing with**



**30 concurrent users** 

**GET:** read a file

**PUT: upload files** 

**DELETE: remove files** 

**Security measures** 

**Monitoring and Testing** 

**Deployment** 



### Simply carried out by means of



**Security measures** 

**Monitoring and Testing** 

**Deployment** 

**Scaling** 



## Internal solution by combining

#### **On-premise cluster and Docker swarm**



**Data ownership** 

**Hardware control** 

Flexibility and customization



**Large initial Capex** 

Regular maintenance

**Specialized staff** 

### Outsourcing to external provider



**Scalability** 

**Global reach** 

Modern standards: OBJ storage



**Storage costs** 

**Usage costs** 

Non data residency