

University of Bamberg



DSG-DSAM-M Lab

Session 9: Google Firestore

Google Firestore



- Schemaless
- **Native Mode** | Datastore Mode
- Database
 - Collection
 - Document
 - + Field
 - + Subcollection
- Designed for fast queries

Task 1

- 1) Browser: In your Google Cloud Project, create a Firestore DB in Native Mode:
<https://console.cloud.google.com/firestore>
- 2) Browser: In the Firestore DB create:
 - A collection called `movies`
 - In the collection `movies`, a document with fields:
 - `title`: "Wicked"
 - `releaseYear`: 2024
 - In the collection `movies`, a document with fields:
 - `title`: "Moana 2"
 - `releaseYear`: 2024

15
Minutes

Client libraries

- Pre-build libraries for different platforms/programming languages available
- Documentation online:
<https://firebase.google.com/docs/firestore/quickstart#java>
- What you need:
 - Prepare Connection (Authentication!)
 - Set up connection (GCP Project and Database)
 - Client API for requests

Task 2

0) Import the gradle project `simple-firestore-template` from the VC locally

1) Read the data you added in Task 1 and log it

https://firebase.google.com/docs/firestore/query-data/get-data#java_5

2) Add another movie from code:

<https://firebase.google.com/docs/firestore/manage-data/add-data>

`title: "28 Years later", releaseYear: 2025`

3) Query all movies with release year 2024 or 2025

https://firebase.google.com/docs/firestore/query-data/get-data#java_11

20
Minutes