

Greek Mythology Explorer – Final Report

Natural Language Processing and Information Retrieval 01

-

Final Group Project

Tim Leute (50251142)

Elyesa Duru

Hamidreza Rahimian

Dilara …

Content

[1 Introduction 3](#_Toc200346252)

[1.1 Motivation 3](#_Toc200346253)

[1.2 Project goals and use case 3](#_Toc200346254)

[2 Data Acquisition and Graph Modelling 4](#_Toc200346255)

[2.1 Data source: Wikidata and SPARQL 4](#_Toc200346256)

[2.2 Graph construction: Nodes, edges and relationships 4](#_Toc200346257)

[3 System Architecture 4](#_Toc200346258)

[3.1 Technology stack overview 4](#_Toc200346259)

[3.2 Graph database structure 4](#_Toc200346260)

[3.3 Web integration and interface 4](#_Toc200346261)

[3.4 Migration from early prototypes 4](#_Toc200346262)

[4 Core Features 4](#_Toc200346263)

[4.1 Interactive graph exploration 4](#_Toc200346264)

[4.2 Shortest path queries 4](#_Toc200346265)

[4.3 Character similarity matching via vector comparison 4](#_Toc200346266)

[5 Evaluation 4](#_Toc200346267)

[5.1 Evaluation setup and methodology 4](#_Toc200346268)

[5.2 Relevance metrics: Precision@K, MAP, NDCG 4](#_Toc200346269)

[5.3 Results and Interpretation 4](#_Toc200346270)

[6 Conclusion and Outlook 4](#_Toc200346271)

# Introduction

## Motivation

## Project goals and use case

# Data Acquisition and Graph Modelling

## Data source: Wikidata and SPARQL

## Graph construction: Nodes, edges and relationships

# System Architecture

## Technology stack overview

## Graph database structure

## Web integration and interface

## Migration from early prototypes

# Core Features

## Interactive graph exploration

## Shortest path queries

## Character similarity matching via vector comparison

# Evaluation

## Evaluation setup and methodology

## Relevance metrics: Precision@K, MAP, NDCG

## Results and Interpretation

# Conclusion and Outlook