

# GAME GRAPH

## VIDEO GAME METADATA GRAPH DATABASE

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#### PROJECT DESCRIPTION

GAME GRAPH IS A VIDEO GAME METADATA GRAPH DATABASE AND WEB APPLICATION THAT PROVIDES AN EASY AND EXTENSIBLE WAY TO CREATE, STORE, AND RETRIEVE METADATA ABOUT VIDEO GAMES.

BUILDING UPON THE WORK DONE AT THE SEATTLE INTERACTIVE MEDIA MUSEUM (SIMM) AND THE GAME METADATA RESEARCH (GAMER) GROUP, THIS APPLICATION ENVISIONS EVERY POSSIBLE POINT OF INFORMATION WITHIN A PROPERTY GRAPH DATABASE FRAMEWORK. BY UTILIZING THE GRAPH DATABASE MODEL, USERS ARE ABLE TO EASILY EXPLORE THE RELATIONSHIPS OF VIDEO GAMES.

#### PROCESS

THE DATABASE IS BUILT ON NEO4J, A GRAPH DATABASE USING THE CYPHER QUERY LANGUAGE.

FOR THE USER WEB APPLICATION, WE BUILT A SIMPLE PYTHON APPLICATION. THE APPLICATION MAKES CALLS TO THE DATABASE USING THE PY2NEO TOOLKIT.

#### OUTCOMES

THE DATABASE CAN BE USED TO RECORD ANY TYPE OF METADATA ABOUT VIDEO GAMES.

THE SYSTEM ALSO RECORDS USER INPUT TO PROVIDE PROVIDENCE FOR RECORD KEEPING.

PLATFORM FOR DATA ANALYSIS.

#### NEXT STEPS

CATALOG MORE GAMES AND MORE TYPES OF METADATA

TEST FOR SCALABILITY

BEAUTIFY APPLICATION INTERFACE

BUILD IN RECOMMENDATION ENGINE

#### CITATIONS

[HTTP://NEO4J.COM/](http://neo4j.com/)

[HTTP://FLASK.POCOO.ORG/](http://flask.pocoo.org/)

[HTTP://PY2NEO.ORG/2.0/](http://py2neo.org/2.0/)

[HTTP://GAMER.ISCHOOL.UW.EDU/](http://gamer.ischool.uw.edu/)

#### ACKNOWLEDGMENTS

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