
CMPE321:
INTRODUCTION TO DATABASE SYSTEMS
HOMEWORK 3

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1 Introduction

In this project, we are asked to implement a UI that displays authors, papers, topics and SOTA (state of the art) result of the papers that is calculated by the system. There will be three entities:

- Author
- Paper
- Topic

2 Assumptions & Constraints

2.1 Constraints

- The author name-surname tuple will be unique.
- Each paper may have multiple authors or topics, however paper titles must be unique.
- Topic name must be unique and system must calculate the SOTA score of the topic from the paper that is available in database

2.2 Assumptions

2.2.1 Assumptions

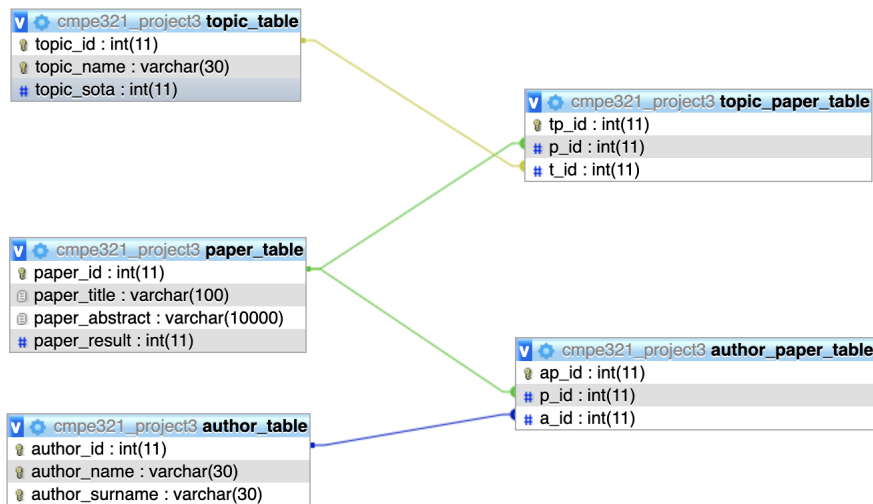
- Author(s) and topic(s) that are related to paper to be added have been added before paper is added.
- Paper abstract has a 10.000 character limit.

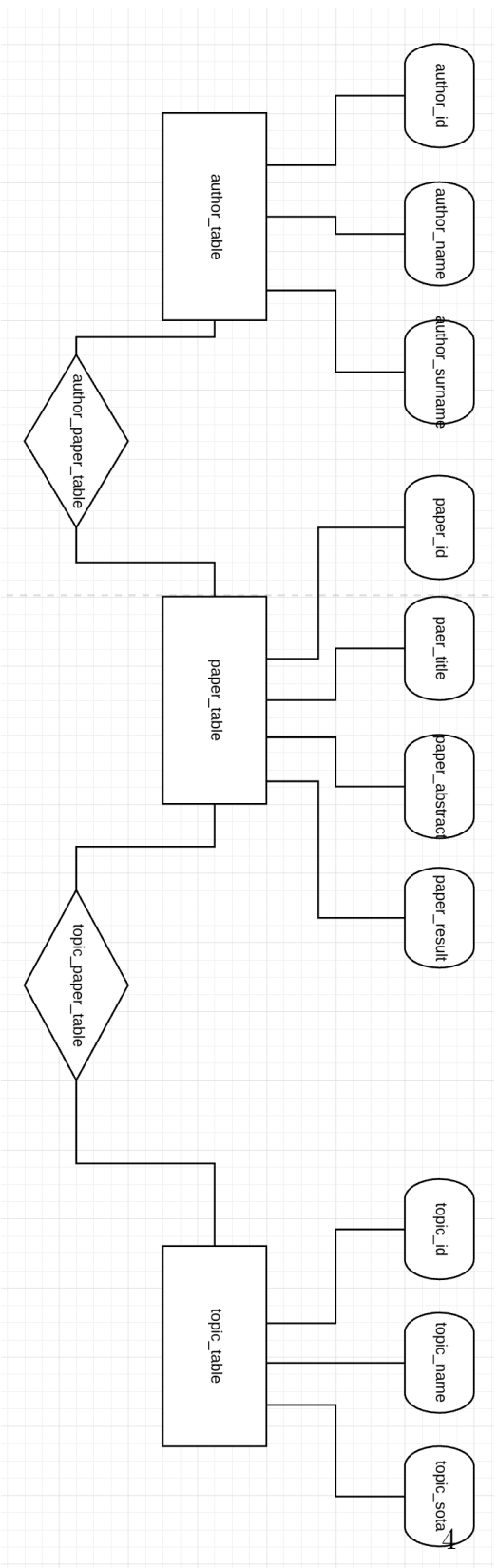
3 Operations

- Add/update/delete papers, authors and topics. (Only admins)
- View all papers of an author
- View SOTA results by topic
- View SOTA result of a topic that is chosen and the paper that has the SOTA result

- View papers on a specific topic
- Rank authors by number of SOTA results they have
- Search a keyword in title/abstract and view
- View co-authors of an author

4 E-R Diagrams





5 Conclusions & Assessment

In this project, I have learned useful information about how to make php application and apply database queries as web pages. And also, I am feeling more comfortable about sql queries and the entity- relationship concept in database models.