Serviço Público Federal
Ministério da Educação
Fundação Universidade Federal de Mato Grosso do Sul

Software Design Specification

1 Introduction

This document records the design decisions to the implementation of the CSRepo System, as well as the reasoning behind each of them. Design registration is done from different design views.

2 Technology

As development IDE we use NETBeans with the java language, to the WebService we use technology Web Services REST JSON . The Rest architecture provide acess to resources and the Rest client acesses and the presents the resouces. Rest can use various representations to represent a resource Text, Json and XML. We use Json.

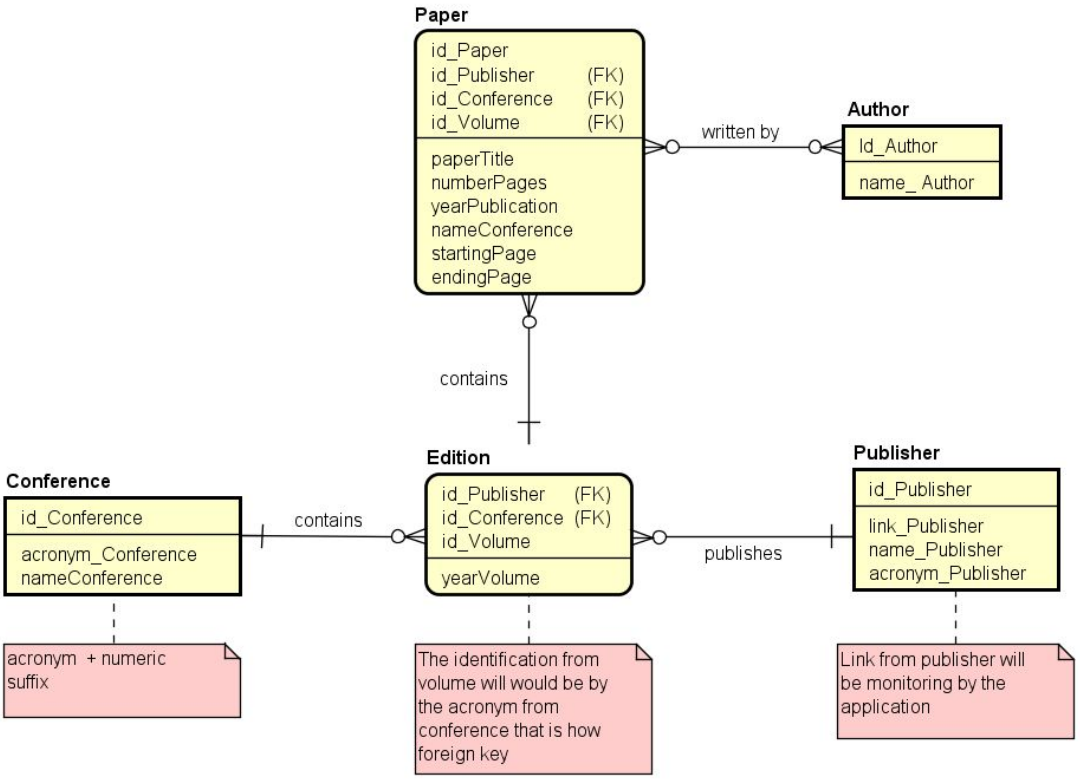
We use maven as the project dependency manager, to the persistence we use Hibernat with Hibernate with the JPA (*Java Persistence API*) specification. As database generator system used PostgreSQL.

3 System Views

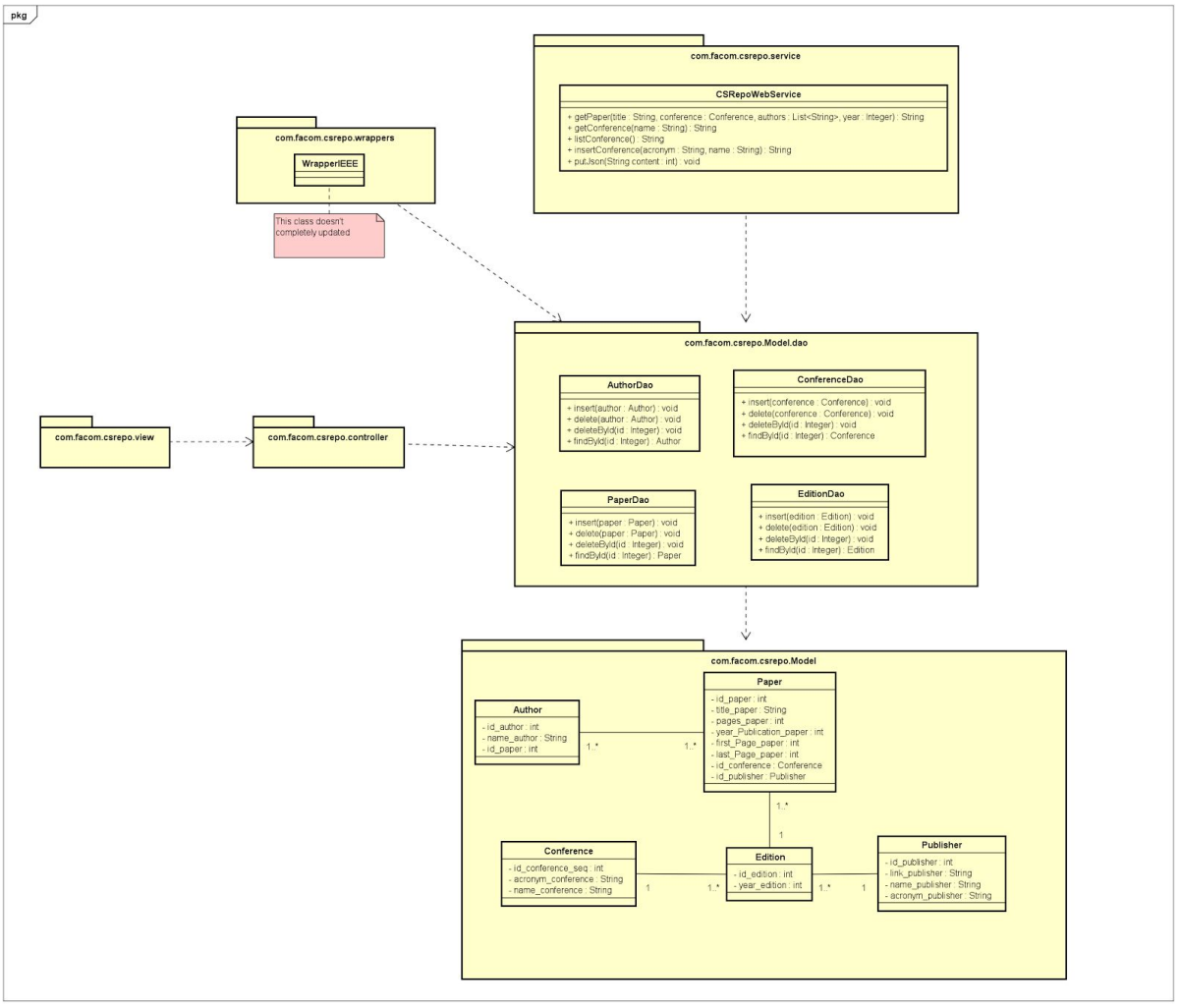
In this section the system design is described, considering the visions Cada diferente visão enfoca um diferente aspecto do sistema, representando-o por meio de modelos específicos.

3.1 Logical View

Below is the diagram of the relationship entity CSRepo, this diagram shows the relationships of entity in relationship between entities in the database:


Paper
id_Paper
id_Publisher (FK)
id_Conference (FK)
id_Volume (FK)
paperTitle
numberPages
yearPublication
nameConference
startingPage
endingPage
written by
Author
Id_Author
name_ Author
contains
Conference
id_Conference
acronym_Conference
nameConference
contains
Edition
id_Publisher (FK)
id_Conference (FK)
id_Volume
yearVolume
publishes
Publisher
id_Publisher
link_Publisher
name_Publisher
acronym_Publisher
acronym + numeric suffix
The identification from volume will would be by the acronym from conference that is how foreign key
Link from publisher will be monitoring by the application

Below the diagram of classes this diagram shows how classes, attributes and their relationships without system



4 User interface view

Below is the link to download the dynamic pdf of the CSRepo prototype:

https://github.com/karol-milano/CSRepo/blob/master/Docs/Requirements/Quality%20layer%20interface/CSRepoLayout2.1.pdf

5 Algorithm Detailing

5.1 Wrapper algorithm

1. Check the conferences registered at the database;
2. Access the table editing database to check the last year of edition registered in the database ;
3. Search the publisher's website for papers from selected conferences from the year set ;
4. Extract the metadata in json format ;
5. Extract metadata only as needed by CSRepo;
6. Include this data in the database.