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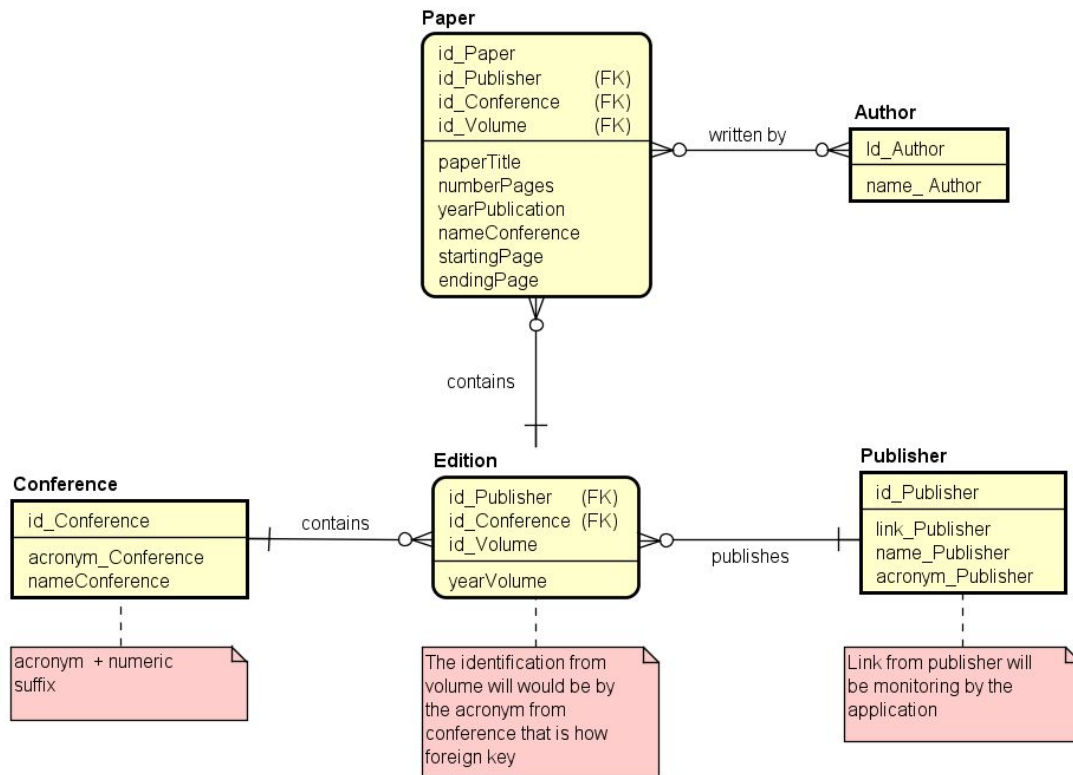
We use maven as the project dependency manager, to the persistence ultilizamos Hibernat with Hibernate with the JPA (*Java Persistence API*) specification. As database generator system used PostgreSQL.
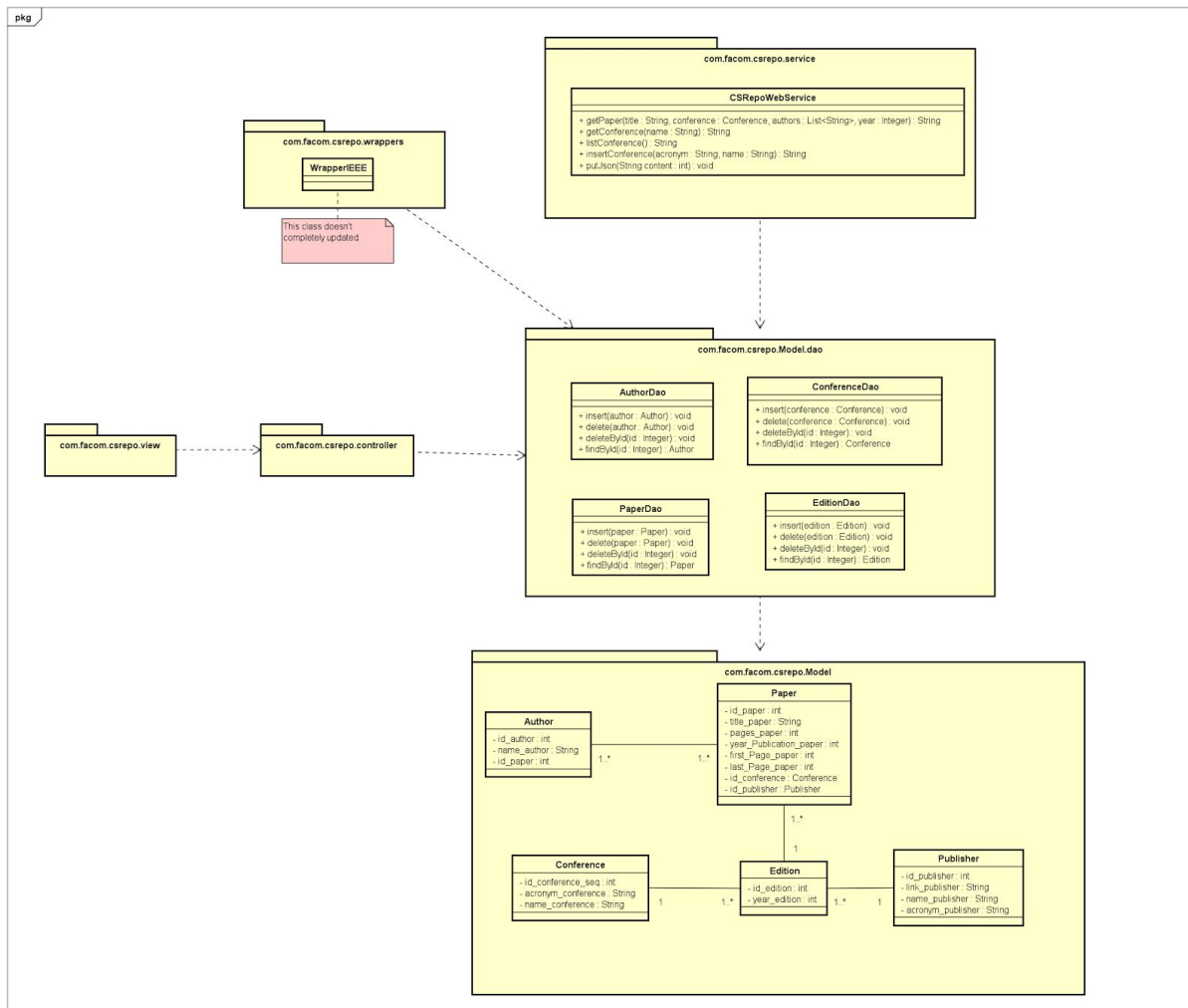
3   System Views

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.