

Assignment 3 - Part 3

Database Tables

Our database: Our database is only added to once upon looking into a repo. When we load the repository from github, we populate all the tables for a given repository. We then use the DB to query for any information we need instead of calling online to Github every time.

List of tables - note each table has a primary key:

Repository - has name, url, creator.

Commit - has a name, description, and date. Belongs to Repository (FK), has an author (FK)

File - has a name, reference to parent folder (nullable FK), and belongs to repository (FK)

Author - has a name

Branch - has a name and belongs to repository (FK)

FileChanges - refer to a file (FK) and a commit (FK). Has a copy of the old file, new file, and diff

RepoAuthors - refer to a Repo (FK) and author (FK).

Meta-table: table view of our tables

Table	Primary Key					
Repositories	Repository ID	Name	Url	Creator		
Commits	CommitID	Name	Description	Date	Author - FK to AuthorID	Repository - FK to Repository ID
Files	FileID	Name	ParentFolder - FK to FilesID	Repository - FK to Repository ID		
Authors	AuthorID	Name				
Branches	BranchID	Name	Repository - FK to Repository			

			ID			
FileChanges	FileChangeID	File - FK to FileID	Commit - FK to CommitID	oldFile	newFile	diff
RepoAuthors	RepoAuthorID	Repo - FK to Repository ID	Author - FK to AuthorID			