

FasTeX

easy bibliography editing application

Group 1

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1 Introduction

1.1 Purpose

The purpose of this document is to describe the implementation of the FasTeX which is a bibliography reference manager. The FasTeX is designed to create and display BibTeX documents.

1.2 Scope

This document describes the implementation details of FasTeX. The software will consist of three major functions. First function creates new BibTeX documents, second function displays existing ones and third function edits these existing BibTeX documents.

1.3 Scenario

When users enter the system, they will see the display page. There is a toolbar on the upper side of the page. In this toolbar there will be an “open” button to import BibTeX files into the system. Users can see BibTeX files in the table which is on the middle of the page. When users select one of the rows and click edit button, which is in the toolbar, they can edit the BibTeX they selected. There is also a text field for users to search between BibTeX files on the table.

On the toolbar of display page there is a create button which will open the create page. When users click create, there will appear a toolbar on the upper side of the page. In this toolbar there will be four buttons. We named them as ‘Back’, ‘Undo’, ‘Clear’ and ‘Delete’. On the left side of the page there will be text fields which holds the BibTeX variables and under them there is a save button. Lastly, on the middle of the window, there is a table for users to be able to see what they have created.

2 Use Cases

2.1 Use Case Model Survey

2.1.1 Actors : The Public User

The Public User is a generic user representing a person who will create and edit documents but has a valid reason for viewing and searching a document or set of documents in relation to one or more cases.

2.2 List of Use Cases

- Create New Document
- Generated Document Modification
- Search Document Into Workflow

- Display Documents

2.3 Use Case Diagram

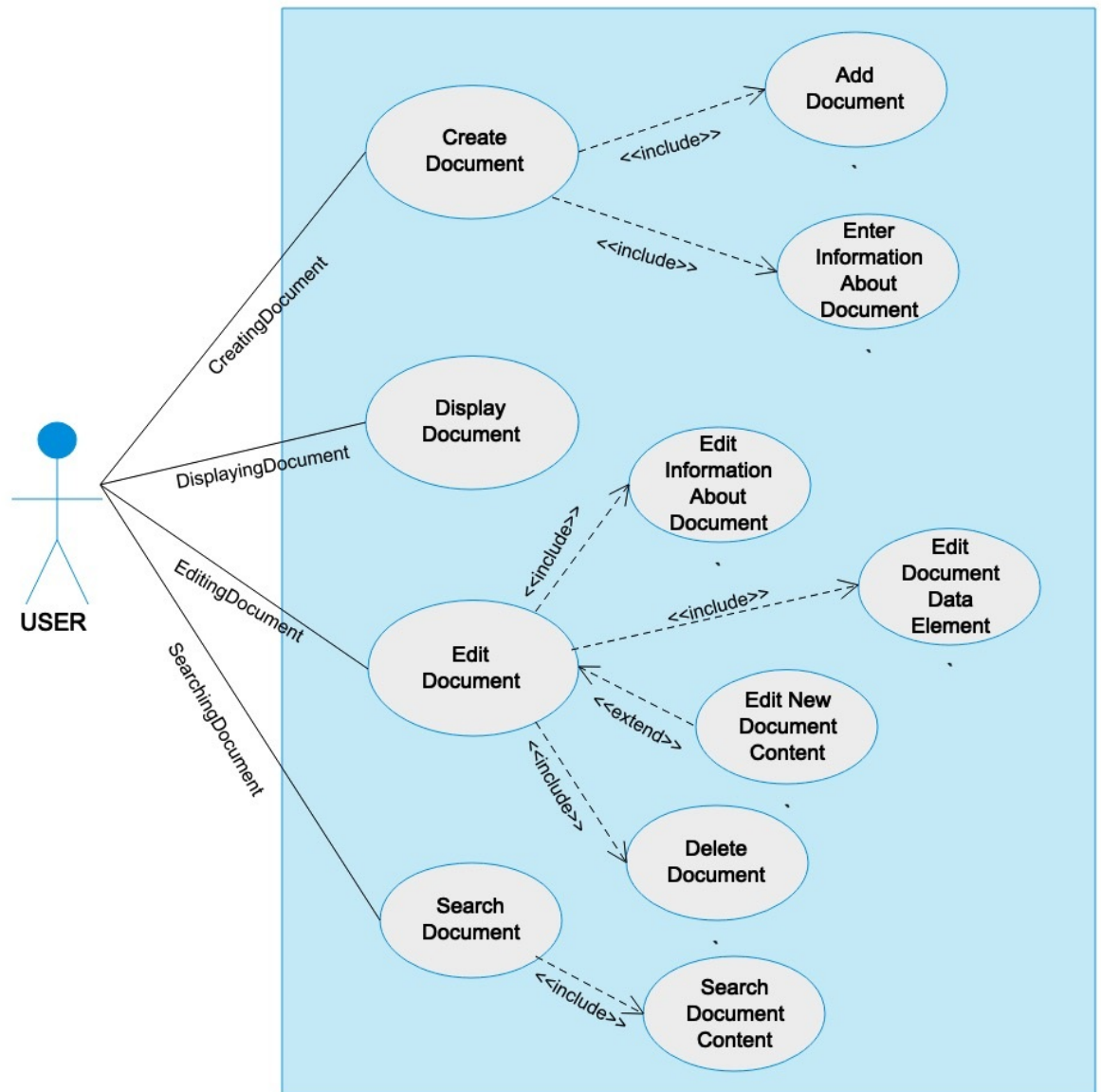


Figure 1: Public User Use Cases

2.4 Brief Description

This use case describes modifying the data set to modify the document displayed to the user and the action to what will the user do in this program, such as create new BibTeX file, user also can edit and search this file too. As the user's wish, the user can display whole documents over the screen.

2.5 Goals

- The successful completion of document generation and modification.
- Successfully completing a document ready for processing as part of a workflow and notifying the intended target that the document is ready for processing.
- The user generates the document and reviews it as acceptable for use.

3 Class Diagrams

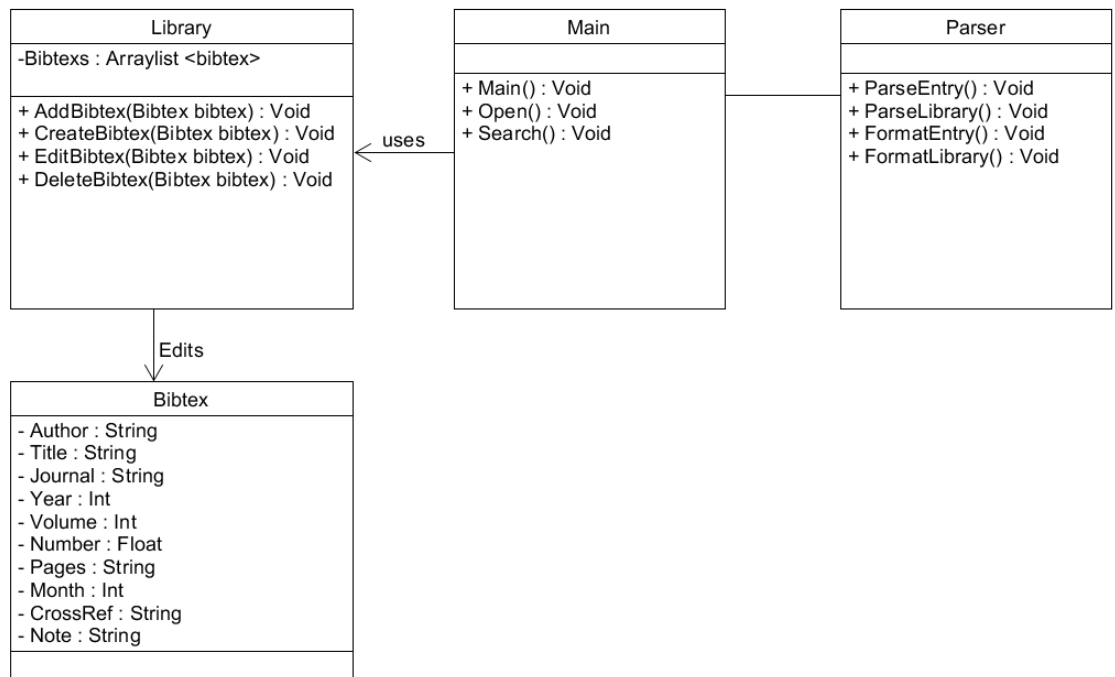


Figure 2: FasTeX Class Diagram

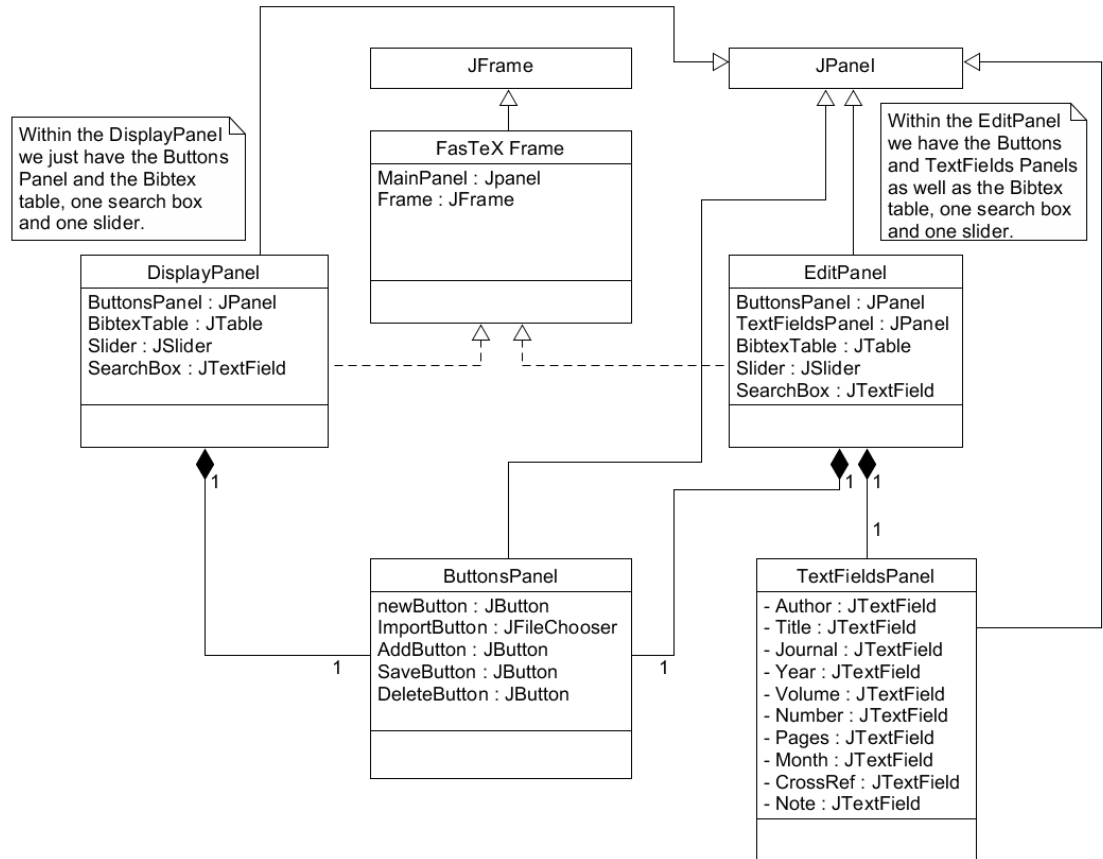


Figure 3: FasTeX Graphical User Interface Class Diagram

4 Dynamic Models

4.1 Sequence Diagrams

These diagrams illustrates the sequence of event occurrence for each utility that FaSteX provides.

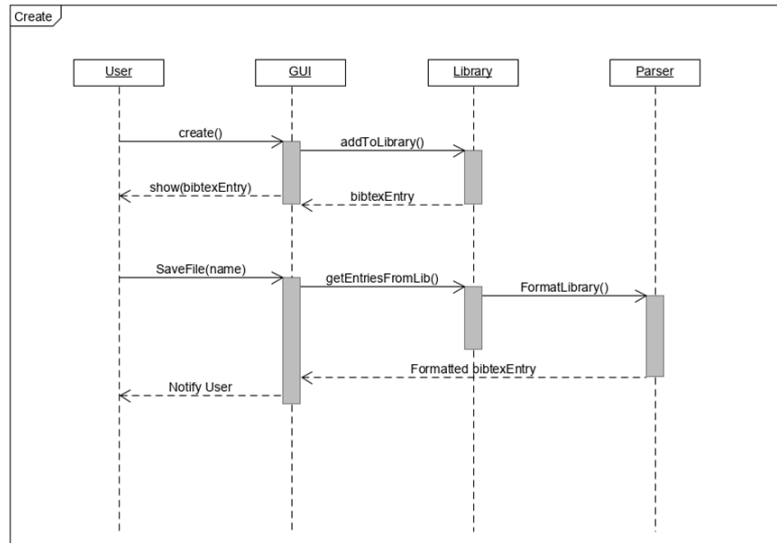


Figure 4: Create Sequence Diagram

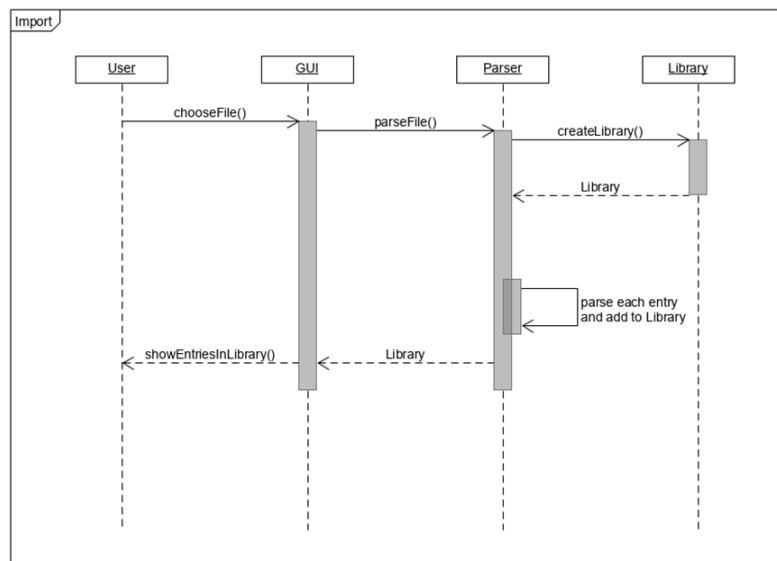


Figure 5: Import Sequence Diagram

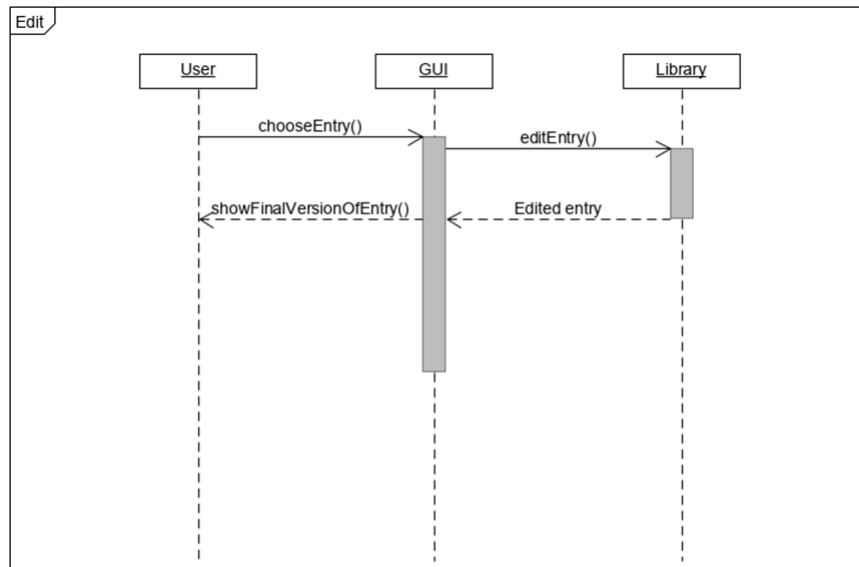


Figure 6: Edit Sequence Diagram

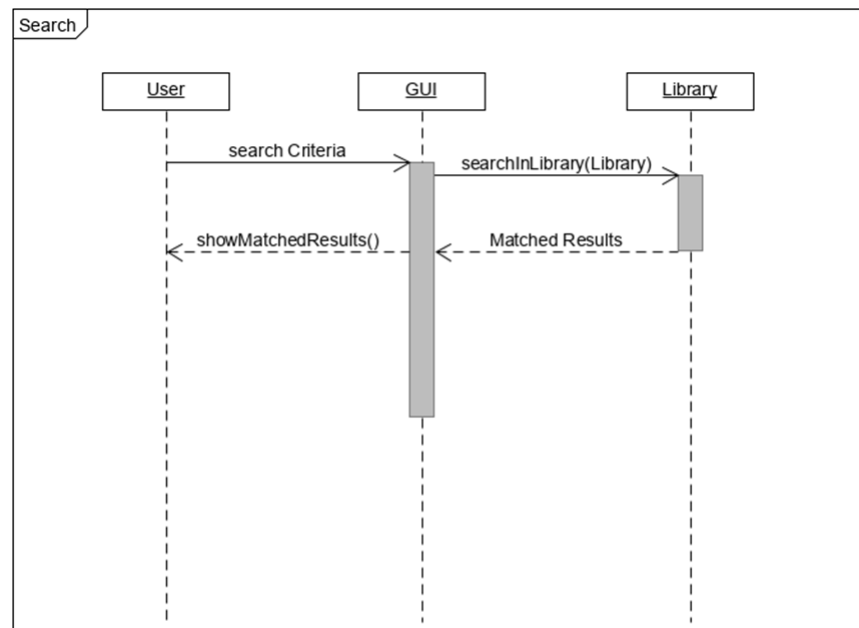


Figure 7: Search Sequence Diagram

4.2 State Diagram

This diagram illustrates all possible transitions among the program's states and how these transitions are triggered.

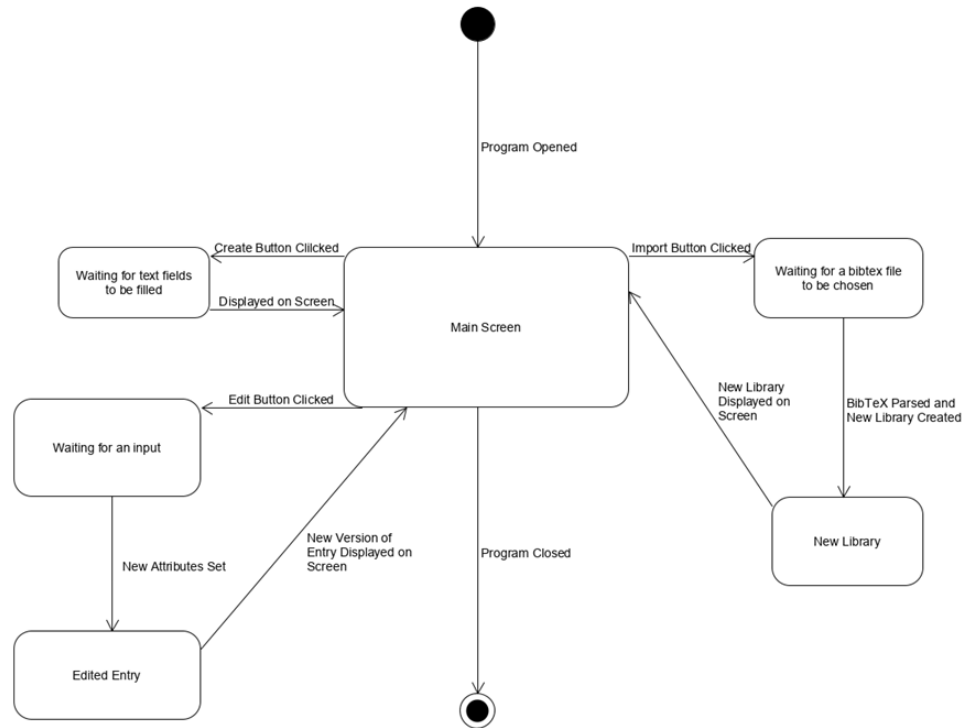


Figure 8: State Diagram

5 Design Overview

The Design Overview is section to introduce and give a brief overview of the design of interface; orientations and functions of each button and space. This allows for the reader and user of the document to orient themselves to the design and see a summary before proceeding into the details of the design by following mock ups - prototypes.

5.1 Mock Ups

Author	Title	Journal	Year	Volume	Number	Pages	Month	Crossref	Note
A1	T1	J1	2019	V1	1	10	1		
A1	T2	J2	2019	V2	2	10	2		
A1	T3	J3	2019	V3	3	10	3		
A1	T4	J4	2019	V4	4	10	4		
A1	T5	J5	2019	V5	5	22	5		
A1	T6	J6	2019	V6	6	33	5		
A1	T7	J7	2019	V7	7	22	5		
A2	T8	J8	2019	V8	8	45	4		
A1	T9	J9	2019	V9	9	2	3		
A1	T10	J10	2019	V10	10	2	4		
A1	T11	J11	2019	V11	11	4	5		

Figure 9: : Display Scene

Figure 9 is our opening scene. We want user to see his/her previous BibTeX files at first sight. Toolbar is fixed: Home (returns back to display scene) ; undo, delete, edit and search

Author	Title	Journal	Year	Volume	Number	Pages	Month	Crossref	Note
A1	T1	J1	2019	V1	1	10	1		

Figure 10: :Search function

[illegible]

User can edit his/her BibTeX table by clicking edit button. Then latex form appears from left. The form requires users to enter following to save each column for new BibTeX file; author, month, year, title, volume, journal, number, pages, cross reference and notes.

[illegible]

By adding required fields and pressing plus button afterwards, user can add a new bibtex file into first column.

[illegible]

Figure 12: Clear All Button

Basic but helpful button; user can clear all inputs from latex part by this clear all button.



Figure 15: : Deleted BibTeX file

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