



# Mimir: A Multi-Semester Online Textbook Written by Students

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## Introduction:

Being built on an open platform: MediaWiki, the Mimir project is a textbook covering and expanding upon the course material of COMP825:Programming Languages. As this textbook is designed to be utilized by future Computing Technology classes, not only do the contributors of Mimir have to explain the content using text, they also will create code examples and provide helpful visuals. Through the Mimir, students will develop a scholarly understanding of each topic helping further develop their comprehension.

## Objectives:

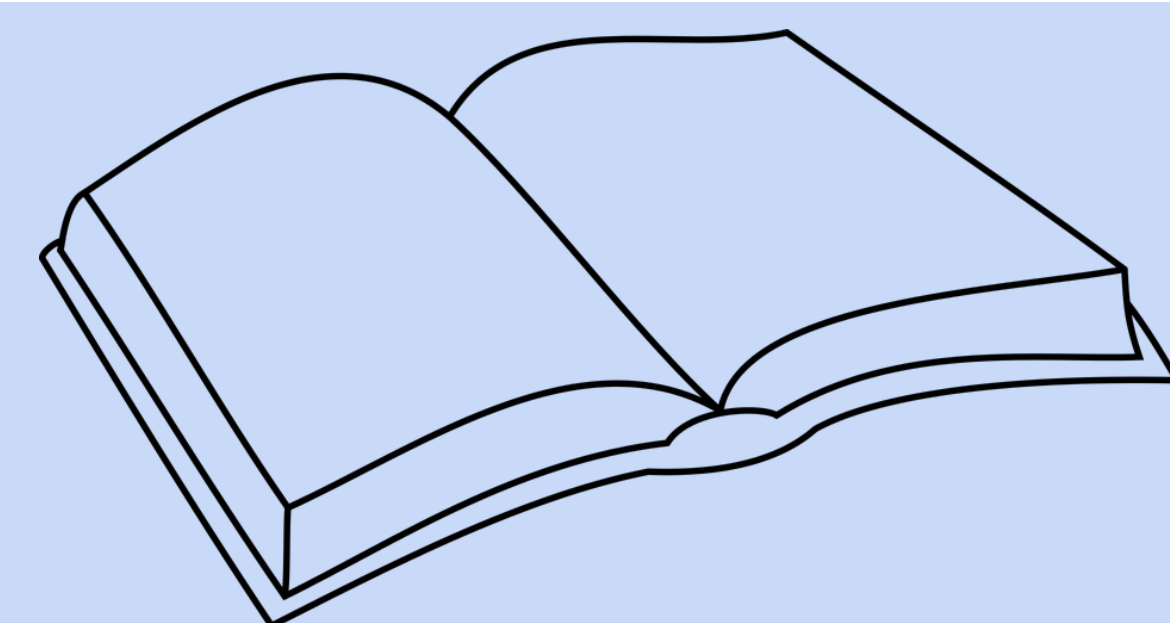
The primary objective for this project is to build a textbook written and edited by students undertaking the course Programming Languages. This will provide them a reference to provide clarifications on course material. The goal for our class this semester is to further improve the textbook and provide the following semesters with a more complete source of information. This goal will be achieved through revision of textbook's existing material as well as adding missing sections.

## Improvement Process

Working with draft 7 was not a easy task as it was a collaborative effort of previous 6 drafts. Students from previous semesters worked on it and improved it by editing the missing parts, removing irrelevant information, or adding interactive exercises.

Cross-Semester continuity is the major problem faced by students each semester trying to protect the essence of the book. While working on draft seven a group of 6 graduate students decided the divide the work among themselves each individually working on different chapters and coming up with innovative ways to recreate the drafts. Constantly taking the advice of the peers from the weekly meeting and implementing the thoughts from the meeting was a task to be appreciated. In order to collaborate while still working independently, weekly meetings were held to share their findings and offer advice relating to textbook. Each graduate student has put their heart into Mimir, developing it to be a guide to drive through the course and make sure that the book really matters.

## Chapters:



Grammars

Imperative Programming

Functional Programming

Logic Programming

Visual Programming

Procedural Programming

Object-Oriented

Programming

Tokenization and Parsing



## Team Contribution:

Although the improvements to each student's assigned chapter varied depending on what each previously lacked, many of the revisions shared a lot in common. One of the most prevalent weaknesses of each chapter was that they lacked a consistent format. This happens when several authors work on the same body of work without acknowledging the previous' approach to writing it. It was determined that to fix this lack of consistency, some of the chapters had to be rewritten. Although the task was extremely tedious, it gave the altered chapter's a much more complete feel. Another feature many of the chapters lacked was code examples. To fix this, examples relevant to each chapter were created. This in turn, improved the textbook's consistency as a whole and progressed it towards the goal of covering all the required topics.



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