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| Diary Entry Java Application – Final Project |
| By Katharine Brumback – Initial Project Proposal |

# Overview

## Purpose of the Application

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|  | |  |  | | --- | --- | | Busy office table | The primary aim of my Diary Entry Java application is to provide users with a digital space to document their personal experiences, thoughts, and reflections. A digital diary can act as a simple yet effective tool for mindfulness and emotional wellbeing. Users can jot down notes, record events, or share their private feelings in a safe digital space.  A digital diary serves multiple purposes aside from mere record-keeping. Diaries play a pivotal role in growth and mindfulness along with understanding patterns in behavior and obtaining insight into emotional wellbeing. Aside from the average user recording memories, the app will be able to be used as a general note taker for studies, projects, and test practice. | |

## User Interface

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|  | The user interface will be designed using JavaFX. It will consist of the following main screens:   * Login Screen: For user authentication * Dashboard: Overview of recent entries and access to various functionalities. * Entry Editor: A rich-text-editor for creating or editing diary entries. * Search & Browse: For searching past entries based on keywords, dates, or tags. |

## Classes – original design

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| ***User***  ***Represents the user of the application*** | * Parent Class: None (Main Class) * Fields: ‘userID’, ‘username’, ‘hashedPassword’, ‘email’, dateCreated’ * Methods: ‘login()’, ‘register()’, ‘updateProfile’ |
| ***Diary Entry***  ***The bulk of the details and functionalities of a diary/journal entry*** | * *Parent Class: None* * *Fields: ‘entryID’, ‘userID’, ‘title’, ‘content’, ‘dateCreated’, ‘lastModified’, ‘tags’* * *Methods: ‘createEntry()’, ‘editEntry()’, ‘deleteEntry()’, ‘searchEntries()’* |
| ***Field Handler (Abstract Class)***  ***Blueprint for file handling operations*** | * *Parent Class: None* * *Fields: ‘filePath’, ‘delimiter’* * *Methods: ‘readFile()’, ‘writeFile()’* |
| ***Text File Handler***  ***Specialization for reading and writing to text files*** | * *Parent Class: ‘FileHandler’* * *Fields: ‘None* * *Methods: ‘readFile()’, ‘writeFile()’* |

## Relationships – original design

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|  | * ‘User’ is the main class that interacts with ‘DiaryEntry’ and ‘FileHandler’. * ‘DiaryEntry’ is the main essence of the Journal and captures individual entries. * ‘FileHandler’ is an abstract class that will be extended by ‘TextFileHandler’ which will deal with reading and writing to a text file for storing data. Essentially the skeletal structure for file operations. |

## Fields Summary – original design

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|  | * ‘User’: ‘userID’, ‘username’, ‘hashedPassword’, ‘email’, ‘dateCreated’ * ‘DiaryEntry’: ‘entryID’, userID’, ‘title’, ‘content’, ‘dateCreated’, ‘lastModified’, ‘tags’ * ‘FileHandler’: ‘filePath’, ‘delimiter’ * ‘TextFileHandler’: Inherits ‘filePath’, ‘delimiter’ from FileHandler |

## JavaFX UI Design – Updated 10/13/2023

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## Error Handling

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|  | Coded into the app – visible in JavaFX UI Design screenshots |

## UML Class Diagram – updated 10/13/2023

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## Final Project GitHUb Link

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| https://github.com/MissLadyPandas/Final\_FinalProduct/ |  |

## Final Statement

The start of the project was okay, but I ran into problems when I got held up with other school stuff. Even with extra time, I struggled with some tech issues like MySQL and XAMPP. Because of all that, I couldn't make the app like I imagined. If I did it again, I'd make a simpler diary app and not try to cram so much in, especially with other schoolwork going on.