# JET TEXT EDITOR

Term Project

CISC 471 - Sftwr Engrg II:Snr Cpstn Prj Phase 1: Project Concept Summary

Jerrica Deloatch, Taysha Bender, Ethan Jalca

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To: Professor Narasimhaswamy Banavara

From: Jerrica Deloatch, Taysha Bender, Ethan Jalca

Date: February 05, 2022

Subject: Written Proposal

Purpose

This letter is written by CISC 471 team one, JET, to propose a concept for our group

project.

Situation

Many technology users find that in their everyday life, they would like to create and edit

simple text files. Some users may also want to store their changes.

**Proposed Solution** 

JET would like to develop a text editor to help users complete these tasks.

Upon opening JET's text editor, users will be greeted by a blank document in which

users can create text files. The text editor will accept basic keystrokes from users, such

as symbols, alpha characters, and digits.

The text editor will also allow users to open and modify text files. Users can make their

changes permanent by saving their files.

Our user interface will be simple as to not complicate our program. We would like users

of all technical capabilities to enjoy accessing our text editor.

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#### TEAM CHARTER

CISC 471 - Sftwr Engrg II:Snr Cpstn Prj- Term Project

#### **MEMBERS**

Jerrica Deloatch

Taysha Bender

Ethan Jalca

#### **OBJECTIVE**

JET will develop a text editor, along with supporting documents for its use.

#### TIME COMMITMENT

JET will work together for the next three months, with weekly efforts contributed from each member.

#### **DELIVERABLES**

JET will deliver a written proposal asking for permission to complete the proposed task, along with this team charter, a project concept summary, a professional business report, program codes, a demo, and a live presentation of its text editor.

#### REPORTING PLAN

JET will meet weekly to assign specific task to each of its members. JET will discuss any late task and progress made towards term project's completion.

**TEAM BIO** 

Jerrica Deloatch

Jerrica Deloatch is an alumnus of Ocean County College and a current student at Mercy

College. She loves technology and is currently majoring in Computer Science. Jerrica

currently has an associate degree, which she earned in 2020, and is working hard to

earn a bachelor's degree. After earning her bachelor's degree, Jerrica will continue to

pursue a higher education at Mercy College.

Jerrica's professional goal is to become an amazing software engineer, technical writer

and indie game creator. Once she has stabilized her career and income, she hopes to

become charitable and fund the college education of high school students who are

struggling in poverty.

Strength: Technical Writing, Writing, Reporting, Designing, Coding

Weakness: Beginning Code

Phone: (347) 780-3645

Email: jerricadeloatch@gmail.com

Website: jerricadeloatch.com

Communication Preference: Phone or Email

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Taysha Bender

Taysha Bender is a current Mercy College student in her final semester of her

bachelor's degree program in computer science. She intends to pursue her master's

degree in business analytics after completing her bachelor's degree. Taysha intends to

use her two degrees to merge the business and technological components of her

education. Her ambition is to incorporate sports into her work as well.

Strength: Writing, Organizing, Presenting, Designing

Weakness: Coding

Phone: (443)-306-7188

Email: tbender@mercy.edu

Communication Preference: Phone

Ethan Jalca

Ethan Jalca is a current student at Mercy College pursing a bachelor's degree in

computer science. He currently is a full-time student with a part time job as a teaching

aide for grades pre-k and kindergarten primarily. He enjoys working with technology

often helping his coworkers with any technical issues they may come across. After he

obtains his bachelor's degree, he will apply for jobs pertaining to technology.

Strength: Programming/Coding

Weakness: Writing

Phone: (917) 828-7311

Email: efjalca@gmail.com

Communication Preference: Phone or Email

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# PROJECT CONCEPT SUMMARY

#### PROJECT SELECTION AND RATIONALE DESCRIPTION

After careful consideration, JET chose to design a text editor due to the pros and benefits it may provide. JET understands the importance of having documentation in one's personal life and for productivity in professions.

For these reasons, JET's text editor will be designed and developed to give users the ability to create text documents, edit text document, and save text documents.

Seeing as, having adequate documentation is vital, JET perceives that our text editor will be worth the investment. For this reason, JET anticipates a satisfactory rate of sale, regarding our text editor. JET believes the market potential for our project to be positive, while the initial investment minimal, and the return on the investment good. We also expect to have positive user feedback and reactions.

JET assumes that we will be done developing our text editor on the 2<sup>nd</sup> of May, in the year of 2022. We trust that minimal cons or risk will be involved, and the development process will progress smoothly.

## **PROJECT PLAN**

This page contains JET's project plan and schedules including milestones according to the deliverable requirements.

Phase one of our team project consist of delivering our project concept summary and proof.

This includes each team member's bios, contact information, strengths, weaknesses, commitment to our team, leadership arrangement, and communication preference.

Considering that these task can easily be accomplished, JET will attempt to have the task done within the first two weeks of the team project being assigned.

As for our project concept summary, JET anticipates that more time will be needed for this deliverable. We plan to have our initial reports fully completed by the 25th of February, in the year of 2022. This will give us roughly one month to do so.

Our goal will have been met if all documents are satisfactory and coding has begun by the 25th of February in the year of 2022.

JET plans to submit all of Phase one deliverables in a timely manner and according to the due date of the 1st of March, in the year of 2022.

## PROJECT PLAN continued

Phase two and three of our team project consist of delivering completed reports, along with our code, and presentation.

This includes a SRS, DDS, architectural design outline, project plan, executive summary, instruction manual, software prototype, test specification, reference page, appendix, etc.

JET anticipates that more time will be needed for these deliverable compared to the deliverables of phase one. We plan to have most of our reports fully completed by the 9th of May, in the year of 2022, which will give us roughly two additional month to do so. But our goal will have been met if most documents are satisfactory and majority of our coding has been completed by the 5th of April, in the year of 2022.

# REQUIREMENTS DEFINITION(SRS DOCUMENT)

# PRODUCT SCOPE

Text editors allow users to create new files, open and close files, and save modifications to files.

# PROUCT FUCTIONALITY

User capabilities:

Create text file

Open text file

Modify text file

Save text file

Close text file

# REQUIREMENTS DEFINITION (SRS DOCUMENT) continued

#### **OPERATING ENVIRONMENT:**

Hardware: PC

Operating System: Windows, macOS, and Linux

Versions: Windows 7 and newer, Mac OS X 10.11 or higher, Linux: RHEL 6/7

## **DESIGN AND IMPLEMENTATION CONSTRAINTS:**

Hardware Constraints: Minimum 1GB Ram

Device Constraints: Designed only for PC

Language Constraints: Only in Python

Time Constraints: Three months

User Documentation:

A user manual will be provided with text editor

External Interface Requirements:

Application will contain a main screen that includes a toolbar to access all commands

# REQUIREMENTS DEFINITION (SRS DOCUMENT) continued

# **CREATE TEXT FILE**

Stimulus: Request new file

Response: System creates blank text file

Priority level = High

# **OPEN TEXT FILE**

Stimulus: Request open file

Response: System opens existing text file

Priority level = High

# SAVE TEXT FILE

Stimulus: Request save file

Response: System saves text file

Priority level = High

# REQUIREMENTS DEFINITION(SRS DOCUMENT) continued

# **SOFTWARE QUALITY ATTRIBUTES**

Usability: This application will be designed for ease of use to accomplish desired tasks.

Users will have access to support provided with the system.

Functionality: This application will work as intended. Appropriate responsibilities will be assigned to congruent architectural elements.

Learnability: This application will have clear and concise user instructions and user manuals. Application will require minimal time and training for user's use.

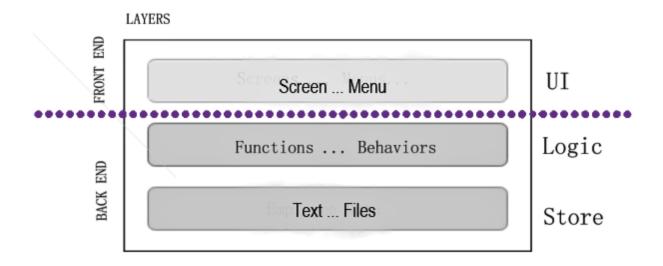
#### ARCHITECTURAL DESIGN

# Layered Architecture Pattern

JET decided to create a presentation layer on top of a data layer.

We chose a layered architecture pattern, because it is easy to develop and maintain, and with three members and specific time constraints, a layered architectural design with simplicity is an excellent choice.

A basic visual aide for understanding our approach to developing JET's text editor is displayed below.



This diagram shows the front-end development of JET's text editor, which consist of one screen and a toolbar users will interact with in order to use the function and features in the back-end portion of development.

# **TEST SPECIFICATION**

File displays drop down list

Shortcuts displays drop down list

Help displays drop down list

"New File" presents a blank document

"Open..." displays window to open and then opens document – except word docs

"Save" saves document

"Save As" displays window to save document and then saves document

"Print" IS NOT WORKING – decided to remove from code and documentation

"Exit" exits program

#### **EXECUTIVE SUMMARY**

JET is a group of three computer scientists that joined together to produce a software program to assist technology users in creating and editing simple text files. The text editor we have created, is fully functional and not only allows users to create and edit files, but also gives them the option to open and save files.

Our text editor has been designed in a simplistic manner which allows computer users of all levels of experience, to use it. But we have also included a user manual for users who feel they need some guidance.

Moving forward, JET would like to expand our horizons by adding the option to open word documents and print files. We also have a future goal of creating a mobile application version of our product.

We all look forward to our future growth.

**JET** 

#### REFERENCES

https://www.vadimbulavin.com/layered-architecture-ios/

https://www.youtube.com/watch?v=8UILgOf20Ho&list=PL4JxLacgYgqTgS8qQPC17fM-NWMTr5GW6

https://www.chegg.com/homework-help/questions-and-answers/example-21-project-selection-model-capstone-design-assume-part-capstone-design-team-opport-g30079756

https://www.studytonight.com/tkinter/text-editor-application-using-tkinter

https://studymoose.com/project-rationale-essay

https://www.scribd.com/document/459786189/SRS-docx

https://www.lce.com/Team-Charters-What-are-they-1219.html

https://pythonguides.com/python-tkinter-text-box/