**October 5, 2019**

**Software Engineering**

**CEN 4010 – U01**

**Deliverable 2**

**Blue Jay**

**Abstract**

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      1. Explain the purpose of each class and refer to the appropriate class diagram in Appendix C and the code in Appendix D. You **are required to** use **at least three (3) design patterns**.
      2. For the ***control object in each major subsystem write OCL*** for the class invariants, pre and post conditions for the methods in the class. Identify the classes in this section that contains the OCL statements.
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**Introduction**

In this chapter we introduce the purpose of BlueJay, and the functional and non-functional requirements of the use cases implemented.

Purpose of system

The purpose of the BlueJay system to allow users to post text and images in a safe and secure manner to reduce the leaking of sensitive information, which can lead to fraud and identity theft. This will be done using many existing security techniques, such as password encryption, SSL encryption, and other safety measures that encourage users to prioritize securing their data.

Requirements

Functional Requirements

Non-functional requirements

Design methodology used

The Unified Software Development Process model was used. The use case diagram, class diagram and state machine diagram were used to represent the design.

Definitions, acronyms, and abbreviations

BlueJay (BJ)

StarUML

SM User (Social Media User)

Overview of document

**Proposed Software Architecture**

Overview

Subsystem Decomposition

Hardware and Software Mapping

Persistent Data Management

Security Management

**Detailed Design**

Overview

State machine

Object Interaction

Detailed Class Design

3.4.1. Explain the purpose of each class and refer to the appropriate class diagram in Appendix C and the code in Appendix D. You are required to use at least three (3) design patterns.

3.4.2. For the control object in each major subsystem write OCL for the class invariants, pre and post conditions for the methods in the class. Identify the classes in this section that contains the OCL statements.

**Glossary**

BlueJay:

StarUML:

SM User:

**Approval page with signatures of the team Appendix**

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**References**

**Appendices**

Appendix A

Appendix B

Appendix C

Appendix D

Appendix E