



Addis Ababa Science and Technology University

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# Encryption and Decryption Tool

Name: BEREKET TADIWOS

Id : ETS 0214/13

Sec: A

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Encryption Manager	
<b>Responsibilities :</b> <ul style="list-style-type: none"><li>managing the encryption process</li></ul>	<b>Collaborates :</b> <ul style="list-style-type: none"><li>Encryption Algorithm</li><li>Key Manager</li><li>File Handler</li><li>User Interface</li></ul>

Decryption Manager	
<b>Responsibilities :</b> <ul style="list-style-type: none"><li>Manages the decryption process.</li></ul>	<b>Collaborates :</b> <ul style="list-style-type: none"><li>Decryption Algorithm</li><li>Key Manager</li><li>File Handler</li><li>User Interface</li></ul>

FileEncryptor & FileDecryptor	
<b>Responsibilities :</b> <ul style="list-style-type: none"><li>Combines encryption/decryption functionalities with file handling.</li></ul>	<b>Collaborates :</b> <ul style="list-style-type: none"><li>EncryptionManager</li><li>DecryptionManager</li><li>FileHandler</li></ul>

File Handler	
<b>Responsibilities :</b> <ul style="list-style-type: none"><li>Handles file-related operations such as reading from and writing to files</li></ul>	<b>Collaborates :</b> <ul style="list-style-type: none"><li>Encryption Manager</li><li>Decryption Manager</li></ul>

Encryption Algorithm & Decryption Algorithm	
<b>Responsibilities :</b> <ul style="list-style-type: none"><li>Represent classes to encapsulate specific encryption and decryption algorithms.</li></ul>	<b>Collaborates :</b> <ul style="list-style-type: none"><li>File Encryptor and Decryptor</li><li>Key Manager</li></ul>

Key Manager	
<b>Responsibilities :</b> <ul style="list-style-type: none"><li>Manages the generation , storage and retrieval of encryption/decryption keys.</li></ul>	<b>Collaborates :</b> <ul style="list-style-type: none"><li>Encryption Algorithm &amp; Decryption Algorithm</li><li>File Encryptor and FileDecryptor</li><li>User Interface</li></ul>

User Interface	
<b>Responsibilities :</b> <ul style="list-style-type: none"><li>Manage queries of the user.</li></ul>	<b>Collaborates :</b> <ul style="list-style-type: none"><li>Encryption Manager</li><li>Decryption Manager</li><li>Key Manager</li></ul>

