

Diagrams

Enigma

1. Context
2. Sequence Diagram
3. Event-Driven
4. Use Case
5. Activity Model - Encryption

Bombe

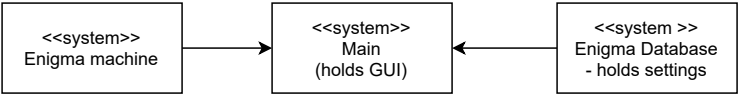
1. Context
2. Sequence Diagram
3. Event-Driven Model
4. Use Case
5. Activity Model

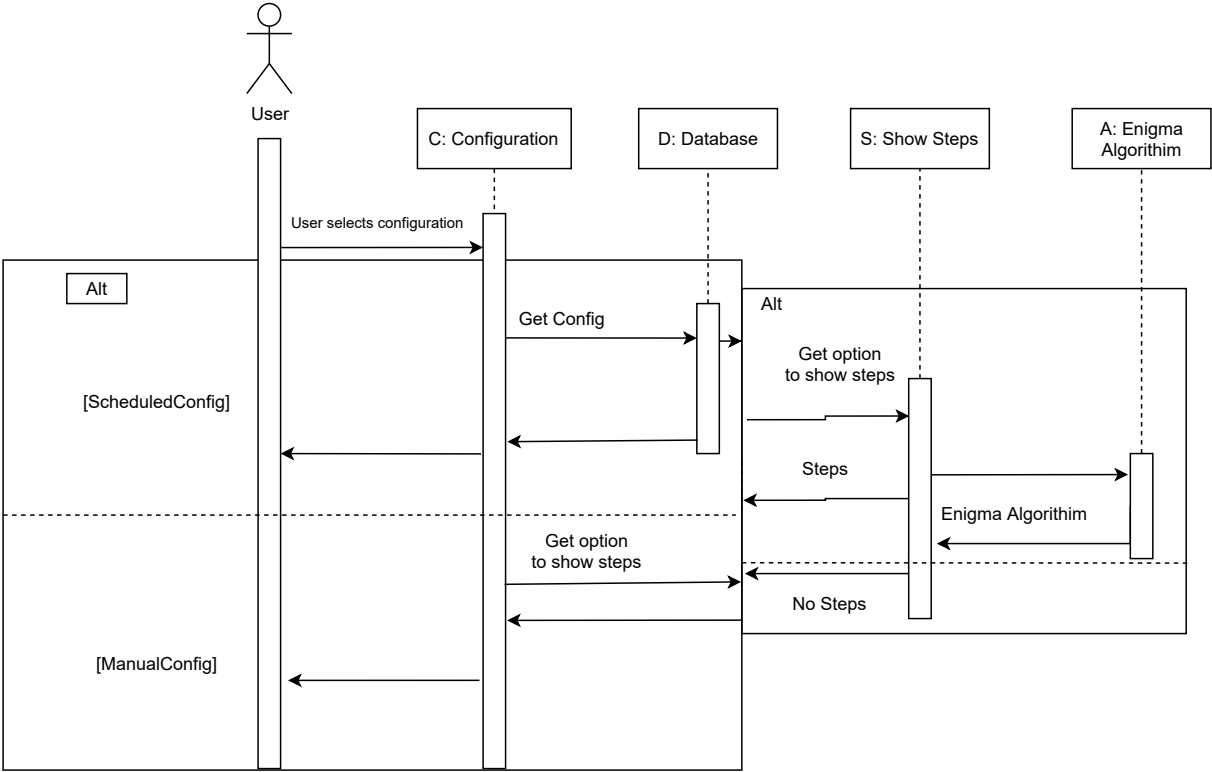
GUI

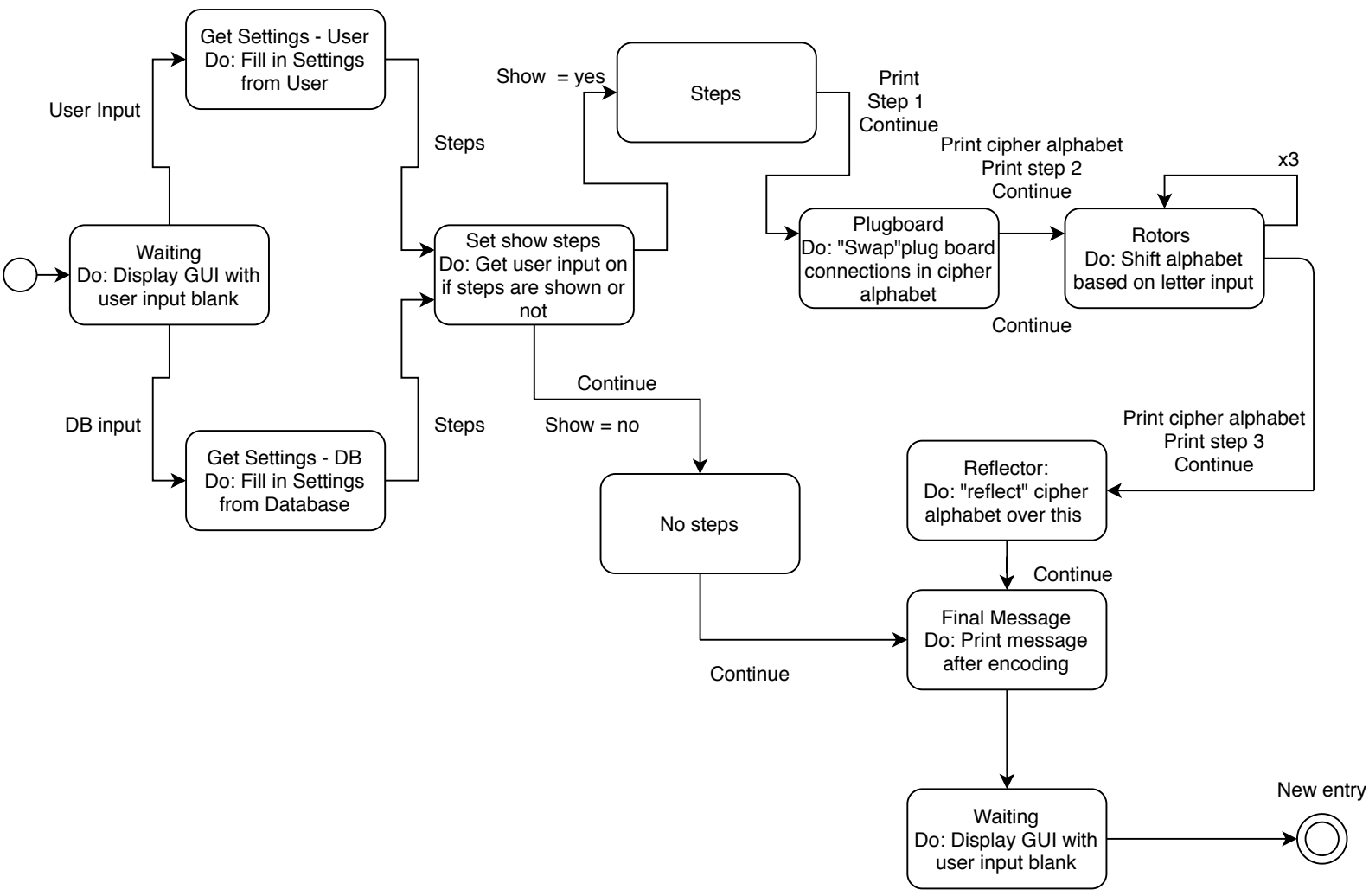
1. Context Model
2. Activity Model
3. Plugboard Model
4. Typed Model
5. On-screen keyboard Model
6. Change rotor Model
7. Bombe Model

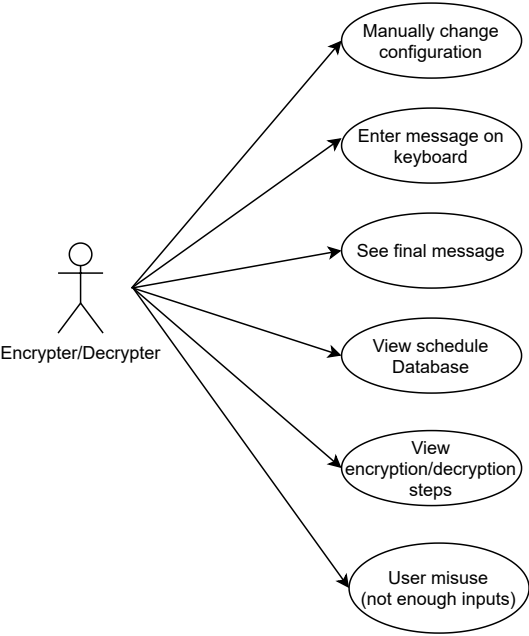
Database

1. Bombe DB layout
2. Enigma Schedule/DB layout
3. Store correct settings(Bombe)









ENIGMA - TABLE

ACTORS: Encrypter and Decrypter

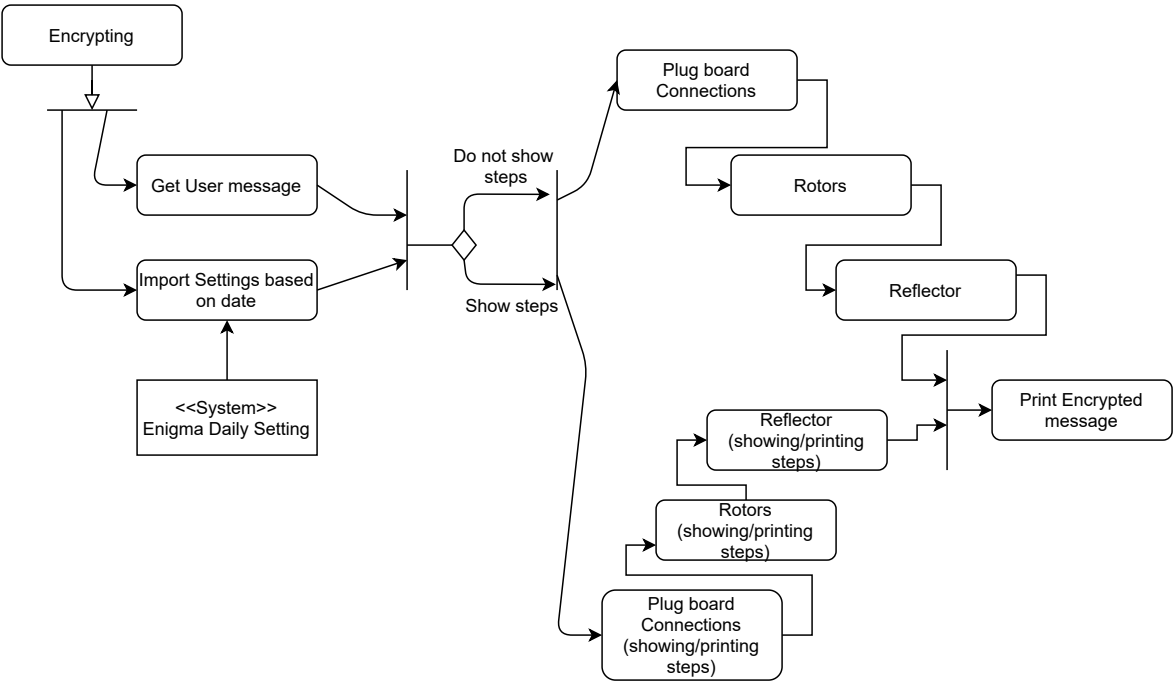
DESCRIPTION: An user can enter in the message date and have the settings be populated from a database or enter in the settings they would like to use. They will also enter in a message that they would like to en/decrypt and can choose to show the en/decryption steps. It will display the final message at the end.

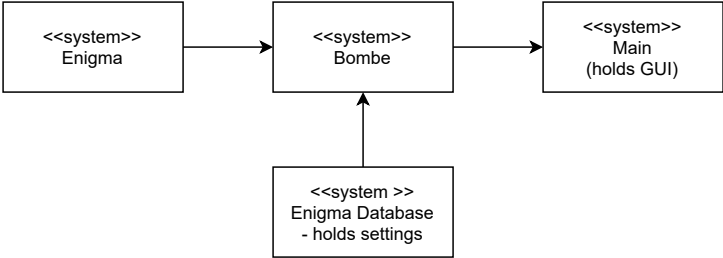
DATA: Input from the keyboard, setting (rotors, reflector and plug board set up)

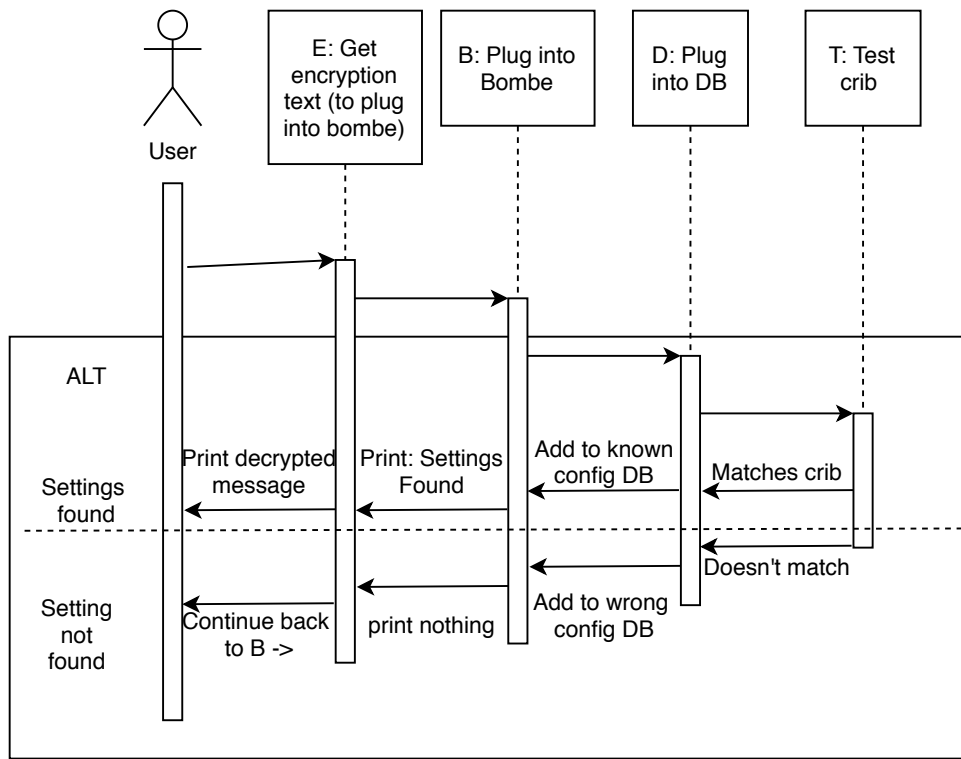
STIMULUS: User command issued by input on keyboard

RESPONSE: Signal through plug board, first rotor, 2nd rotor, 3rd rotor, then reflector, and to output light

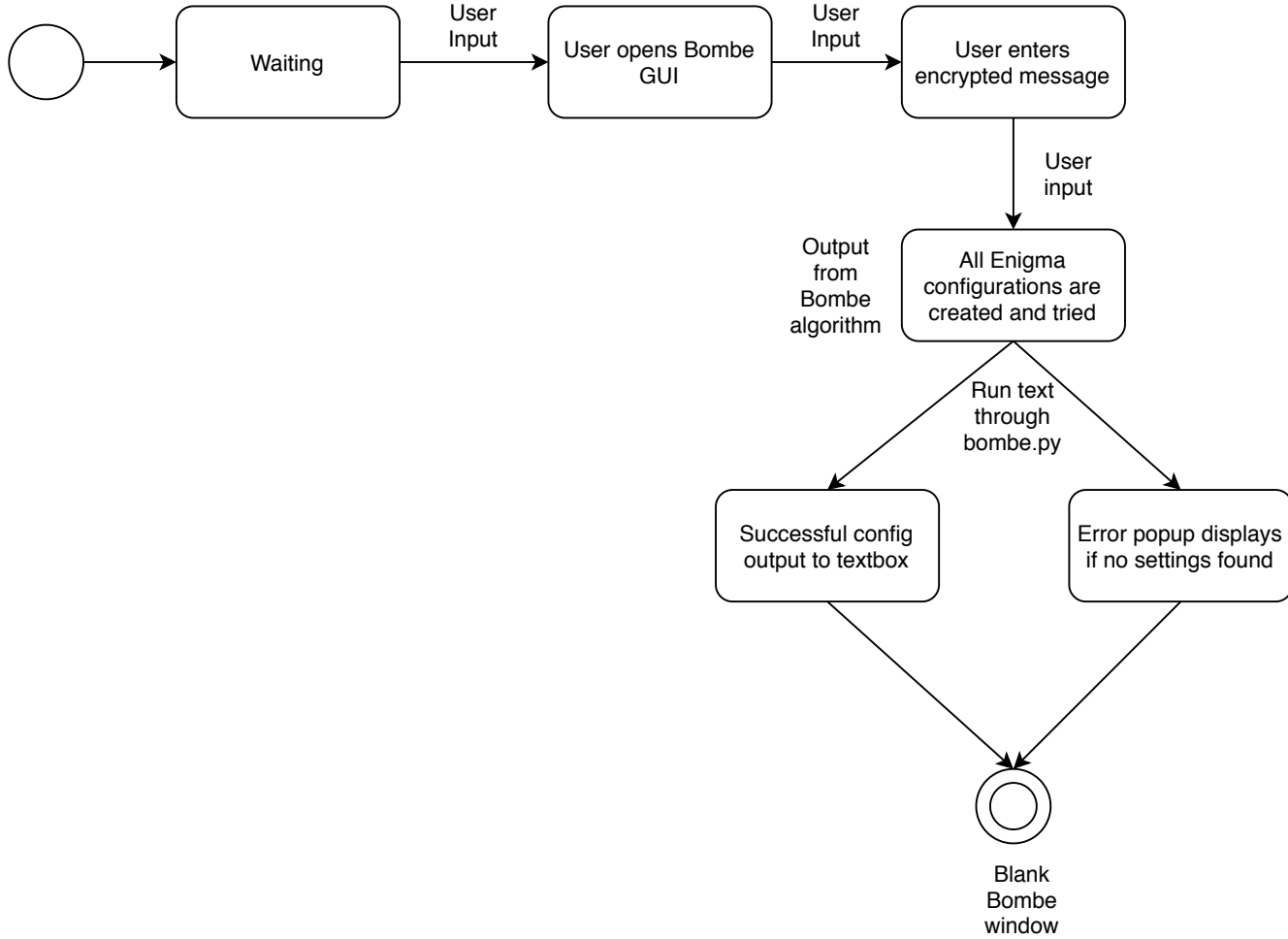
COMMENTS: Letter can not be encrypted as itself. No spaces allowed.
* For Bombe must have a repeated phase at the end of each message*

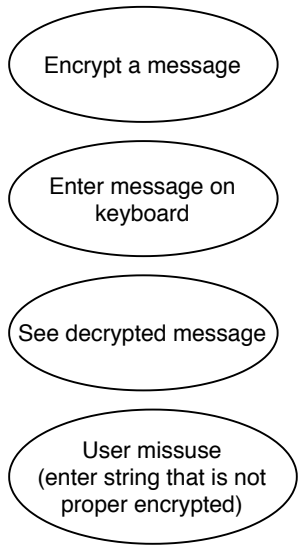
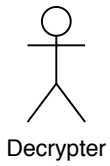






Bombe Event Driven Model





Bombe - Table

ACTORS: Decrypter

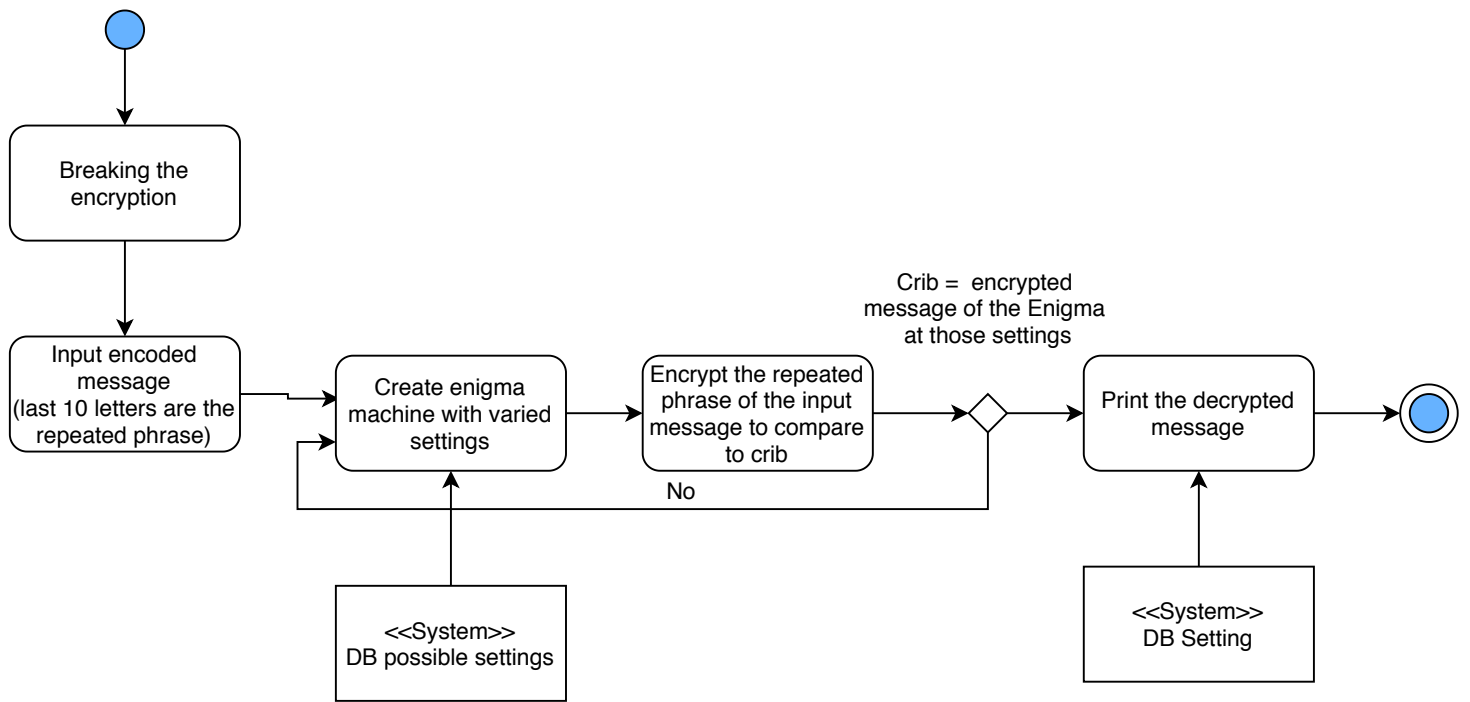
DESCRIPTION:

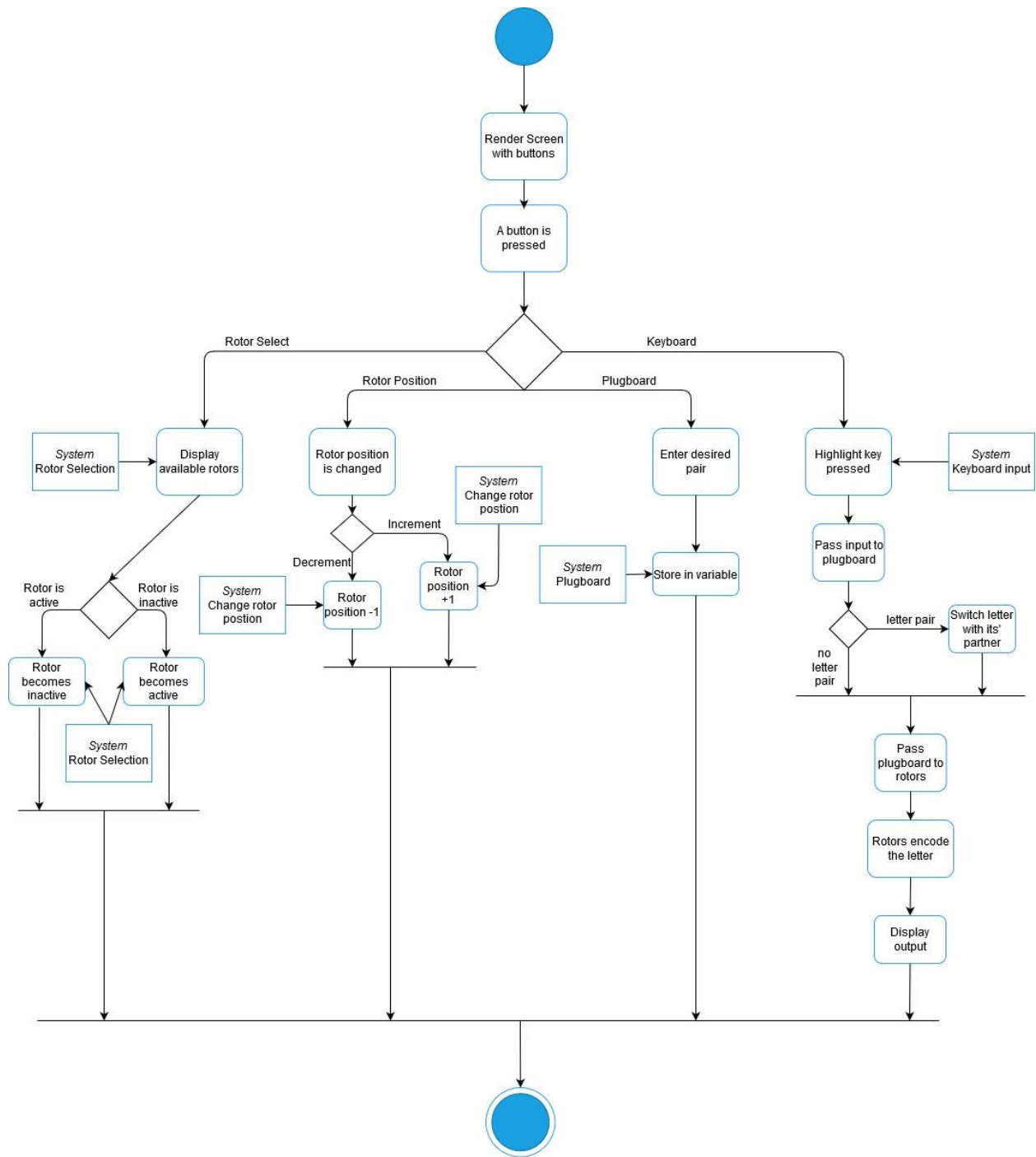
DATA: Input from keyboard
(the message to decrypt)

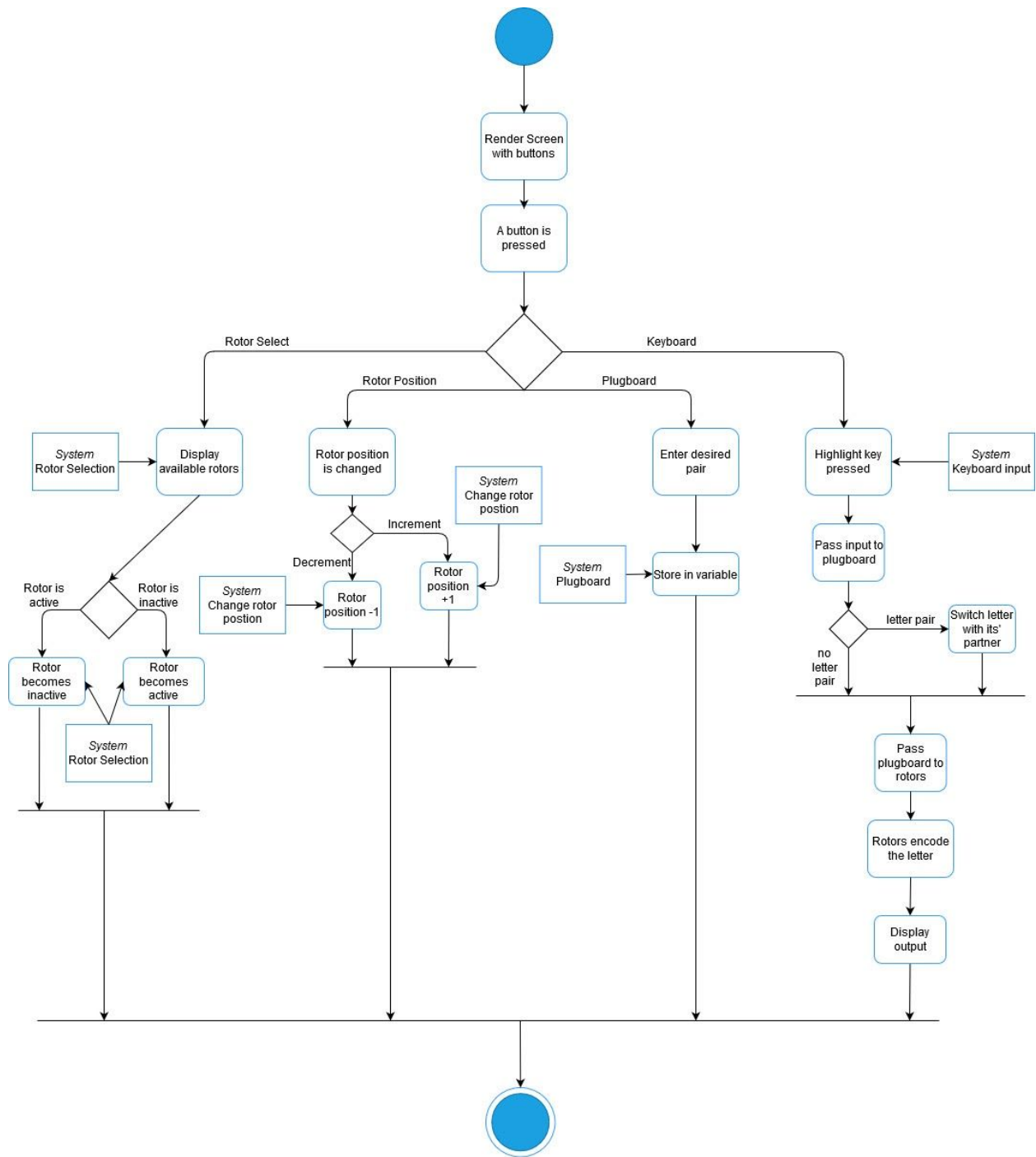
STIMULUS: User command issued by
input on keyboard

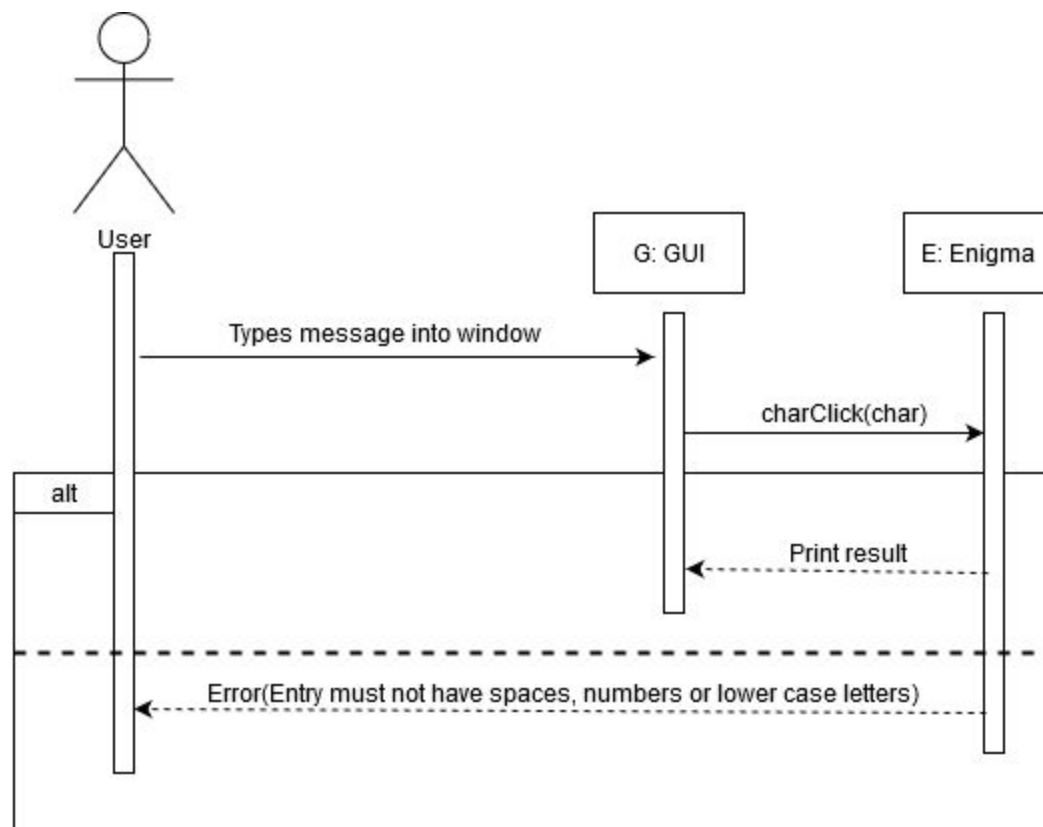
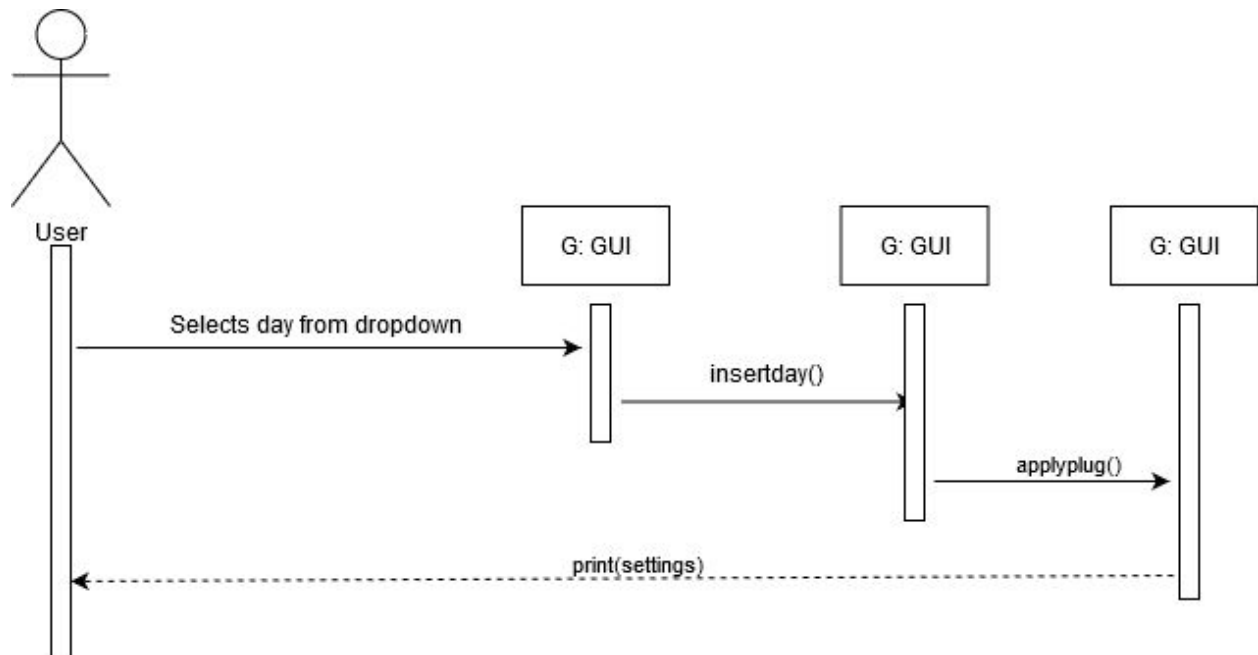
RESPONSE: Create and insatance of
the Enigma machine at various settings.
Will test their output against the
crib. If they are equal, the settings have
been found and print the decrypted message

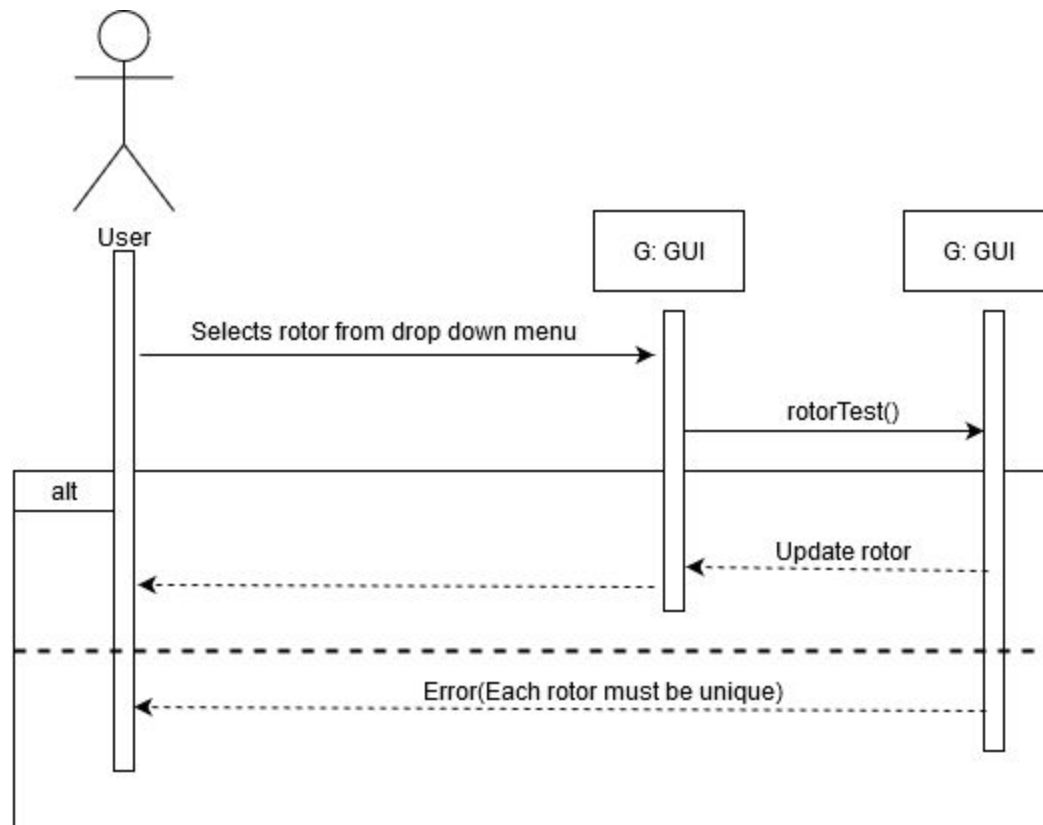
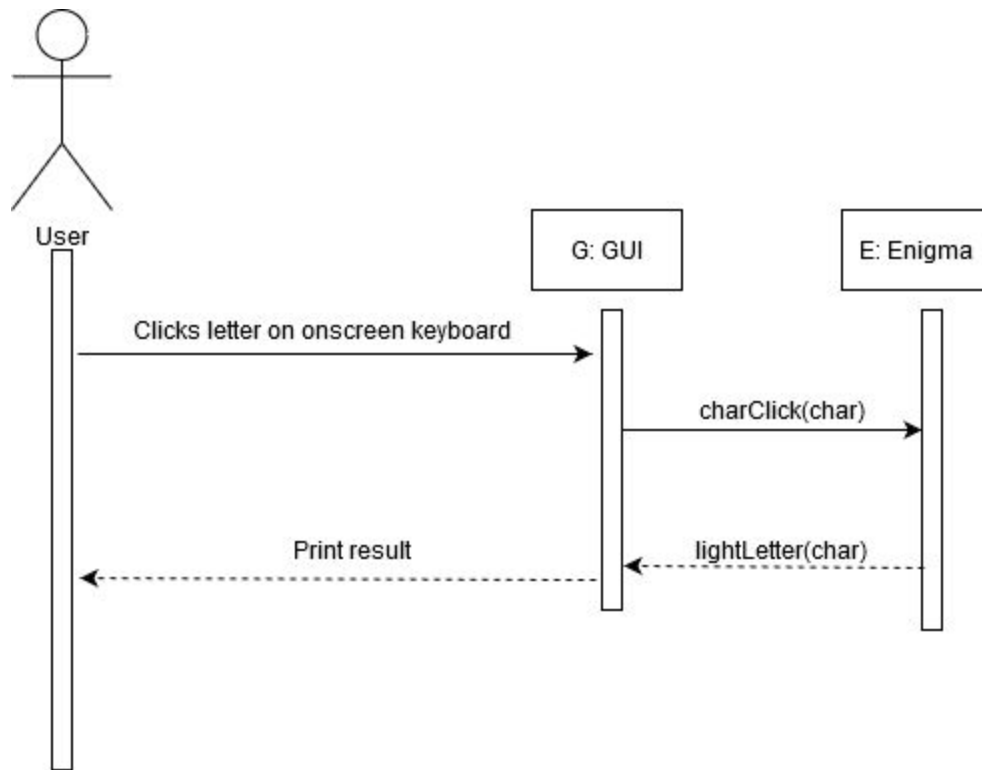
COMMENTS: If the user enters a message that
has not been encrpyted before and the settings are
not valid the Bombe will not be able to find it

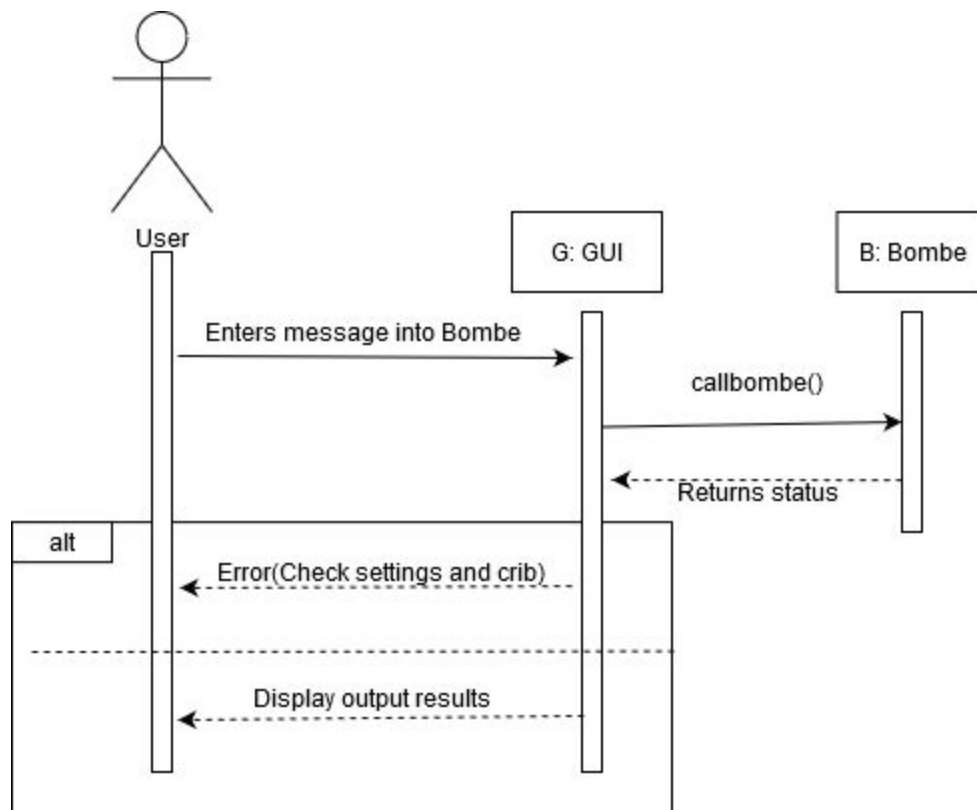












Bombe Database

KnownConfigs	
PK	ID
	ActiveR1
	Offset1
	ActiveR2
	Offset2
	ActiveR3
	Offset3
	Reflector
	DecryptedMsg

Enigma Schedule

Schedule	
PK	Day
	PlugIn
	PlugOut
	ActiveR1
	Offset1
	ActiveR2
	Offset2
	ActiveR3
	Offset3
	Reflector

Bombe Database Store Correct Configurations

