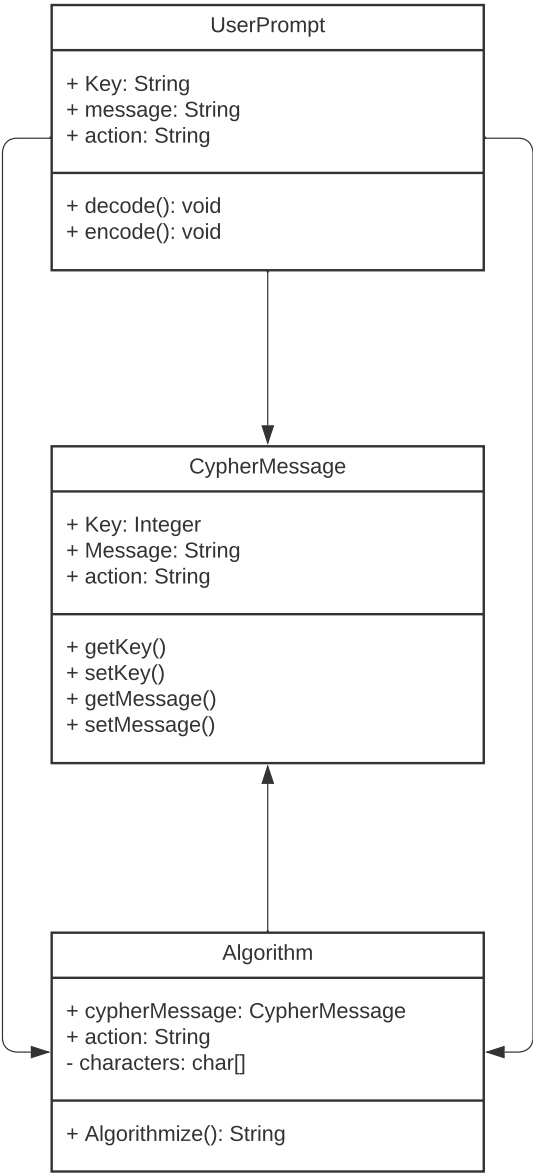# Cypher Encode/Decode UML

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Algorithmize Method Flow Diagram

Demonstrating Algorithm logic for
looping over the user inputed message
and replacing the current character with
a character from the chearacters array

UserPrompt

+ Key: String
+ message: String
+ action: String

+ decode(): void
+ encode(): void

CypherMessage

+ Key: Integer
+ Message: String
+ action: String

+ getKey()
+ setKey()
+ getMessage()
+ setMessage()

Algorithm

+ cypherMessage: CypherMessage
+ action: String
- characters: char[]

+ Algorithmize(): String

Loop cypherMessage.getMessage().length

is action encode or decode?

Encode — Count up from current character by the cypher key string length and insert landing character.

Decode — Count down current character by the cypher key string length and insert landing character.

is current increment less than the message length?

Yes

No

Break Loop