Player

firstName: String lastName: String userName: String

email: String

attemptedCryptograms: Map<String, Attempted>

createCryptogram(puzzleName: String,

solution: String, cypher: Map<char, char>,

maxAttempts: int): boolean

viewUnsolvedCryptograms(void): String

viewCryptogram(puzzleName: String): String solveCryptogram(puzzleName: String): String

viewCompletedCryptograms(void): String

viewCryptogramStatistics(void): String

«utility» **ApplicationUI**

«utility» CryptogramsDB

> «utility» **PlayersDB**

Cryptogram

puzzleName: String

creator: String

dateCreated: Date solution: String

cypher: Map<char, char>

maxAttempts: int numSolved: int

firstThreeSolvers: List<String>

Attempted

currAttempts: int solved: boolean

dateCompleted: Date

checkSolution(solution: String)

incrementCurrAttempts(void): void

flagAsCompleted(solved: boolean): void