## LandingModel

- currView: LandingView

- observers: ArrayList<Obserser>

- username: String

+ play(): boolean

+ getUsername(): String+ logout(): boolean+ leadboard(): boolean

+ registerObserver(observer: Observer): void

#### Word

- ogString: String
- chars: char[]
- + getChars(): char[] + toString(): String

# <<enumeration>> Guess

GREEN YELLOW NONE

#### **Board**

- solution: Word
- guess: Word[]
- guessRemaining: int

+ getGuessRemaining(): int

+ checkWord(guess: Word): Guess[]

+ toggleDebug(): boolean

+ getSolution(): String

#### LoserModel

- currView: LoserView

observers: ArrayList<Observer>

- username: String

+ play(): boolean

+ leaderboard(): boolean

+ back(): boolean

+ registerObserver(observer: Observer): void+ deregisterObserver(observer: Observer): void

+ getUsername(): String

### LoginModel

userInput: StringLoginView: currView

- observers: ArrayList<Observer>

- userList: ArrayList<String>

- users: Hashmap<String, int[]>

+ submitUserLogin(username: String, password: String): boolean

+ removeDebug(): void

+ passwordCheck(currUser: String, username: String, password: String)

+ submitUserRegister(username: String, password: String)

- createSalt(): String

+ getObserversLen(): int

+ hash(password: String, salt: String): String

+ registerObserver(observer: Observer): void

+ deregisterObserver(observer: Observer): void

+ getUserWinLoss(username: String): int[]

+ updateUserWinLoss(username: String, win: int, loss: int): void

+ updateUserData(username: String): void

#### Model

- currView: View

username: StringuserInput: String

- observers: ArrayLists<Observer>

- board: Board

- guessCount: int

- guessList: String[]

+ submitUserInput(text: String): boolean

+ lose(): void

+ back(): boolean

+ registerObserver(observer: Observer): void

+ deregisterObserver(observer: Observer): void

+ getWordList(): HashSet<String>

+ getGuesses(): String[]

+ getSolution(): String

#### LeaderModel

- username: String

- currView: LeaderView

observers: ArrayList<Observer>

+ back(): void

+ registerObserver(observer: Observer): void

+ deregisterObserver(observer: Observer): void

+ getTopUsers(): ArrayList<String>

# VictoryModel

- currView: VictoryView

observers: ArrayList<Observer>

- username: String

+ play(): boolean

+ leaderboard(): boolean

+ back(): boolean

+ registerObserver(observer: Observer): void

+ deregisterObserver(observer: Observer): void

+ getUsername(): String