## MainActivity (extends Activity)

- # mGameState:GameState
- # mVoiceControl:VoiceControl
- # mCanDownload:boolean
- # onCreate(Bundle savedInstanceState): void
- + onRequestPermissionsResult(requestCode:int,
- permissions:String[], grantResults:int[]): void
- + getWordNetDatabase(): void
- + isDownloadManagerAvailable(): boolean
- + checkDownloadPermission(): boolean

## VoiceControl

- mActivity:AppCompatActivity
- mTxtInput:TextView
- mTxtOutput:TextView
- mSpeech:SpeechRecognizer = null
- mIntent:mRecognizerIntent
- mGameState:GameState
- mCanRecord:boolean
- + checkRecordAudioPermission():void
- + promptSpeechInput():void
- onResults(results:Bundle):void
- updateGameState(input:String)

# ContextActionMap (extends Entity)

- # mState:GlobalState = null
- # mPossibleTargets:List
- # mDefaultTarget:Entity = null
- # mPossibleContexts:List
- + addContextActions(context:String, actions:Action...):void
- + addSynonym(synonym:String, action:String):void

#### VoiceProcess

- # mMainActivity:Activity
- # mState:GlobalState
- # mContextActionMap:ContextActionMap
- # mActionContext:Entity
- # mDict:IDictionary = null
- # mTagger:MaxentTagger
- # mDb:ILexicalDatabase = null
- + processInput(input:String):Object

# GameState (extends GlobalState)

- mMainActivity:Activity
- mBattleMap:ContextActionMap
- mOverworldMap:ContextActionMap
- # mBattleVoiceProcess:VoiceProcess
- # mOverworldVoiceProcess:VoiceProcess
- + addDictionary(url:URL):void
- + initState():void
- + updateState(input:String):String

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### GlobalState

- mActionSucceeded:boolean
- + onActionSucceeded(): boolean
- + onActionFailed() : boolean

## CustomWordNet (impl. ILexicalDatabase)

- + mDict:IDictionary
- + getHypernyms(synStr:String):Concept
- $\hbox{- getAllConcepts (word: String,}\\$
- pos:String):Collection
- getMostFrequentConcept(word:String, pos:String):Concept