## **GAME PARAMETERS**

This document contains descriptions of game parameters. Parameters common to both CatchAPet and LeapBall games are defined below.

**selectedHand**: Hand selected by the user.

passedTime : Time in game.
startDate : Time to start the game
currentDate : User's instant history
currentScore : User's instant score

gameStage : Part of the game
gameLevel : Level of the game

gameTime : Game time

wristFlexion: Measures the user's wrist flexion angles.

wristExtansion: Measures the wrist extension angles of the user.

wristRadia: Measures the user's wrist radial angles. wristUlnar: Measures the user's wrist ulnar angles.

wristSupination: Measures the user's wrist supination angles. wristPronation: Measures the user's wrist pronation angles.

**thumbFlexionMkf**: Measures the user's thumb finger flexion mkf joint angles. **thumbFlexionPif**: Measures the user's thumb finger flexion pif joint angles.

 $\label{thmbExtansionMkf} \textbf{thumbExtansionMkf} : \textbf{Measures the user's thumb finger extension mkf} joint angles.$ 

**thumbExtansionPif**: Measures the user's thumb finger extension pif joint angles.

indexFlexionMkf: Measures the user's index finger flexion mkf joint angles.

indexFlexionPif: Measures the user's index finger flexion pif joint angles.

**indexFlexionDif**: Measures the user's index finger flexion dif joint angles.

indexExtansionMkf : Measures the user's index finger extension mkf joint angles.

**indexExtansionPif**: Measures the user's index finger extension pif joint angles.

**indexExtansionDif**: Measures the user's index finger extension dif joint angles.

middleFlexionMkf: Measures the user's middle finger flexion mkf joint angles.

**middleFlexionPif**: Measures the user's middle finger flexion pif joint angles. **middleFlexionDif**: Measures the user's middle finger flexion dif joint angles.

middleExtansionMkf: Measures the user's middle finger extension mkf joint angles.

middleExtansionPif: Measures the user's middle finger extension pif joint angles.

middleExtansionDif: Measures the user's middle finger extension dif joint angles.

 ${\bf ringFlexionMkf:}$  Measures the user's ring finger flexion mkf joint angles.

**ringFlexionPif**: Measures the user's ring finger flexion pif joint angles.

ringFlexionDif: Measures the user's ring finger flexion dif joint angles.

ringExtansionMkf: Measures the user's ring finger extension mkf joint angles.

ringExtansionPif: Measures the user's ring finger extension pif joint angles.

 ${\bf ringExtansionDif:}$  Measures the user's ring finger extension dif joint angles.

 $\label{pinkyFlexionMkf:} \textbf{Measures the user's pinky finger flexion mkf joint angles}.$ 

**pinkyFlexionPif**: Measures the user's pinky finger flexion pif joint angles. **pinkyFlexionDif**: Measures the user's pinky finger flexion dif joint angles.

pinkyExtansionMkf: Measures the user's pinky finger extension mkf joint angles.pinkyExtansionPif: Measures the user's pinky finger extension pif joint angles.pinkyExtansionDif: Measures the user's pinky finger extension dif joint angles.

There are some other specific parameters used for the CatchAPet game which are provided below.

**isRabbitUp**: Has the rabbit gone up?

rabbitTouched: Has the rabbit been touched?

rabbitSuccessTouch: Has the rabbit been touched successfully?

LeapBall Parameters

There are also other specific parameters used for the LeapBall game which are provided below.

**ballHolding:** User holding the ball. **ballTouch:** User touches the ball.