Suggested Protocol for Baseline Data Collection

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NeuroSky
Brain-Computer Interface Technologies

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Introduction

This protocol suggests the best practice for baseline data collection, targeting an optimal balance between user experience and algorithm accuracy using the latest baseline information.

Abbreviation

- AP: Appreciation algorithm
- ME: Mental Effort algorithm
- F: Familiarity algorithm

Suggested Protocol for Baseline data collection

Please find below the suggested protocol for baseline data collection.

- During baseline data collected, user is required to stay in relax and calm state (relative to in-app period) EVERYTIME BEFORE the application. User should keep their eyes open and avoid any unnecessary movement.

- This baseline collection process could happen during the game loading time or any transitional period right before starting the application.
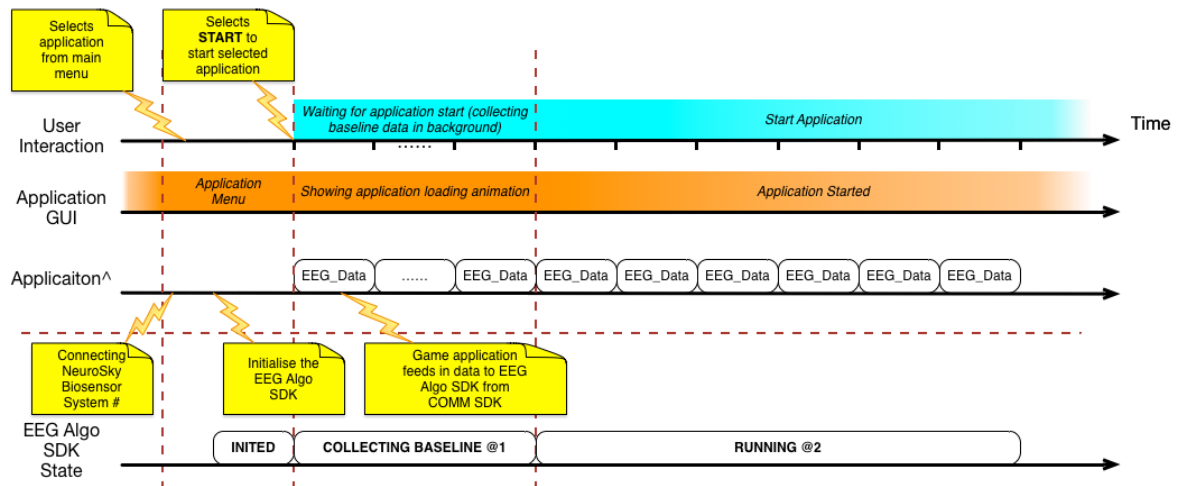

Figure 3.1:

Remark:

- # NeuroSky Biosensor System connection process depends on the actual application implementation.

- ˆ Assuming the hardware platform processing power can complete all supported algorithms (Appreciation, Mental Effort and Familiarity) computation together within ONE second (including the EEG data collection).

- @1 EEG Algorithm SDK would start returning algorithm index(s) (they are: **Attention** and **Meditation**) even in **COLLECTING BASELINE** state

- @2 EEG Algorithm SDK would start returning algorithm index(s) (they are: **Appreciation**, **Mental Effort** and **Familiarity**) based on the specified output rate while in **RUNNING** state