

SensorKit Pre-Application Checklist

Thank you for your interest in SensorKit! Before submitting your application, please ensure you have reviewed the information below and completed all required steps.

There are two stages of entitlements: **Development entitlement** allows access to the requested data types on a limited number of devices to perform appropriate testing with the study app to develop greater familiarity with the data types including formatting, engineering requirements, and quality. **Distribution entitlement** allows implementation of study app to distribute and request the data type of consented study participants. This entitlement is required for individuals to distribute their app via Test Flight or the App Store.

In order to receive SensorKit data, you (or your partner/vendor) must commit to developing a study app and create an [Apple Developer account](#) if you don't already have one. [Apple Developer accounts](#) provide the tools, resources, and support you need to develop and distribute apps, including access to app services, testing tools, app analytics, etc.

Development Entitlement Requirements

To apply for a SensorKit development entitlement, make sure you have:

1. Completed the SensorKit Application Form

- Answer all questions thoroughly and accurately to prevent delays.
 - A. **Justification for requested SensorKit data types:** For each requested data type, provide a brief (1-2 sentence) justification explaining why it is necessary for your study and how it will be used.
 - B. **Study goals summary:** Provide a clear and concise summary of the study's objectives, explaining why you need SensorKit for this research.

2. Next Steps After Submission:

- If your application is approved, you will be required to sign the SensorKit Addendum before entitlement is granted. The Addendum must be signed by the Apple Developer account holder of the institution publishing the study app via Test Flight or the App Store.

Distribution Entitlement Requirements

If you are planning on distributing your app to the App Store or TestFlight soon, submit an application for a SensorKit distribution entitlement. To apply for a distribution entitlement, you must also:

1. Submit Institutional Review Board (IRB) / Ethics Committee (EC) Approval Letter for your study

- Approval must come from an ethical review board that meets all applicable regulatory standards.

2. Ensure your IRB/EC-approved Informed Consent Form (ICF) does the following:

1. Clearly specify all SensorKit data types being collected and use accurate descriptions (see below);
2. Distinguish between: data collected via SensorKit and data obtained from other sources (e.g., Apple devices outside of SensorKit or non-Apple devices).

3. Next Steps After Submission:

- If you haven't already done so, you will be required to sign the SensorKit Addendum.
- SensorKit data can only be shared with individuals within your institution that are directly involved in study data collection and analysis. If you have research collaborators from outside your institution, each applicable outside institution must sign the SensorKit Collaborator Agreement before you can share any SensorKit data and before your entitlement is granted.
- An Apple Developer account is required to access and sign the Collaborator Agreement.

Additional Notes and Recommendations

- *Every study must use a unique app.* Study apps used for previous studies that received a SensorKit entitlement cannot be reused for other studies. Multiple studies cannot be conducted within the same app.
- The SensorKit Addendum and any Collaborator Agreements must be signed *by the applicable institution's designated Apple Developer account holder*. Both agreements must be signed through an institutional Apple Developer account. Personal accounts are not allowed.
- SensorKit data cannot be publicly shared *even after de-identification*, but can be shared with other research collaborators that have signed the SensorKit Collaborator Agreement. SensorKit data cannot be used for commercial purposes nor can it be used to develop a commercial product.
- Data must be retained for the minimum time period necessary (typically 10 or fewer years).
- *Start early to avoid delays.* Identifying your institution's designated Apple Developer account holder can take time. Contact your institution's IT department early to identify this individual and ensure a smooth process.

Example Descriptions of SensorKit Data

1. Clarify which datatypes come from Apple devices.

Example Language: *“With your consent, specific data that is collected by iPhone and Apple Watch and/or data stored in the Apple Health app, will be shared with the study. You will have the ability to review and authorize each data type request in the study app on your iPhone before data is shared. Such data is not collected from devices until you authorize sharing the data with the study. Data types from Apple devices include the following:”*

2. Provide accurate descriptions of SensorKit data types collected in your study.

The following table contains helpful example descriptions of SensorKit datatypes that may be used in and/or adapted for your Informed Consent Form.

SensorKit Datatype	Description
deviceUsage	Device usage, such as frequency and duration of device and app usage, notification data, and charging data. Excludes specific names of websites and apps, and content of notifications.
keyboardMetrics	Keyboard usage, such as number of words typed, typing speed and accuracy, and number of emojis used. Excludes typed content, such as specific words.
onWrist	Describes the watch’s position on the wrist and times that the watch is worn.
messagesUsage	Use of the Messages app, such as number of messages and number of individuals messaged. Excludes any message content and information about people messaged.
phoneUsage	The amount of time on phone calls per day, number of calls and number of individuals called. Excludes any audio content and information about people you’ve talked to.
accelerometer	Acceleration motion data.
faceMetrics	Facial expression data such as brow raise and gaze direction. Excludes images or video.
heartRate	Heart rate data.
mediaEvents	Timestamp of video or images displayed during the use of messaging apps. Excludes content of image or video.
odometer	Odometer data for workouts such as speed and slope.
pedometerData	Step count and pace.
rotationRate	Rotation motion data.
siriSpeechMetrics	Measurements of speech to Siri such as speaking rate, pitch, tenor, and volume. Excludes raw audio data or content of conversations.
telephonySpeechMetrics	Measurements of speech during phone calls and VOIP, such as speaking rate, pitch, tenor, and volume. Excludes raw audio data or content of conversations.
visits	Frequently visited locations that have been given an anonymized identifier, distance from home, approximate arrival and departure times, as well as location type. Excludes GPS data and specific location information.
wristTemperature	Wrist temperature during sleep.
photoplethysmogram	High fidelity optical sensor data that can be used to measure things like heart rate.
electrocardiogram	ECG sensor data, which describes the timing and rhythm of heart beats
ambientLight	Ambient light information.
ambientPressure	Barometric pressure and elevation change.
sleepSessions	Time and duration of detected sleep sessions.
acousticSettings	Audio preferences saved on the device, such as accessibility and music settings, including background sounds, environmental sound measurement, headphone safety, and audio levels.

When you’re ready to apply, complete the application and send it to sensorkitrequest@apple.com. For more information, refer to the [FAQ](#).

SensorKit Research Proposal

Please send your completed form to sensorkitrequest@apple.com

Attach additional pages as necessary.



1. Investigator/Institution:

PI Name

PI Institution/Department

Co-Investigator(s)

Project Title

Concise title to reference this submission.

Contact information

Co-investigator Institution(s)/Department(s)

Prior work and qualifications

Summarize prior work demonstrating investigator/institutional expertise and ability to carry out the described work.

2. Proposed Study

Project Summary/Design

Provide a project description, including hypotheses that will be evaluated using SensorKit data, specific aims, and experimental design details/schematic as applicable. Please also include inclusion and exclusion criteria if they are known at the time of application. Please do not disclose any IP, confidential, and/or proprietary information here or elsewhere within this proposal.

Other Data/Devices

Provide other data collected by the study and the source of the additional data.

Intent to publish

Please state whether you intend to publish study results that include SensorKit data, and any more detailed plans available at the time of this proposal.

Is the study listed, or will the study be listed, on clinicaltrials.gov?

If yes, please provide the NCT number. If no, please provide a website or any details about public-facing information regarding the study.

☐ Yes ☐ No

Current State

Describe the current stage of work on this project, including details as applicable about app development/deployment, IRB submissions/approvals, other forms of financial support applied for and the outcomes, if known, of these applications. If other forms of support restrict institutional rights (e.g., IP, commercialization), please explicitly describe those limitations.

3. SensorKit Data

What SensorKit data types are you requesting access to?

Note - SensorKit is not entitled at a framework level, each data stream, e.g., keyboard metrics, must be requested. See [here](#) for more details about sensor types.

Justification

Please provide justification for the requested data stream as it relates to the study hypotheses and goals.

3.1 Background Processing (Optional)

Learn more about Background Health Research Task: <https://www.researchandcare.org/faq/>

Yes

No

I don't know

4. App/Platform

What app will be used in this study, and, if a custom app is being used, what developer created/is creating the app?

App Name

Is a version of this app available today on the App Store/iTunes?

Yes

No

If yes, App ID:

App developer:

5. Data and Privacy

Where will study data be stored?

Who will have access to study data?

Have any of the individuals listed above, along with the PI/co-PI(s) been cited for research misconduct by any institution, association, funding body, etc.?

If yes, please describe the incident and what steps have been taken to ensure no future misconduct is committed.

Please describe your analysis plan:

Include data types that will be used in combination with SensorKit data, whether data will be used at an individual level and/or aggregated for analyses, etc.

How will data be secured and access to data restricted to the individuals listed above?

How long will study data be stored?

If a participant wishes to withdraw from the study or fails to complete the study for any other reason, how will their stored data be handled?

In order to submit your Proposal, please confirm the following:

You provided a 1-2 sentence justification for each SensorKit data type requested.

You will not publicly share/publish raw or de-identified SensorKit data.

Each SensorKit Entitlement is being used for one unique study & study app.

The SensorKit data collected in your study will not be used for commercial purposes nor will it be used to develop a commercial product.

If you plan to distribute your study app on the App Store or TestFlight: You will share your ethical review board approval and include accurate descriptions of the SensorKit Data in the Informed Consent form.



SensorKit Research Proposal

Please send your completed form to sensorkitrequest@apple.com