

Privacy Policy MoodApp

Last updated 25 October, 2021

This is the Privacy Policy ("Privacy Policy") for an app developed by a researcher of Ghent University ("MoodApp" or "the app") as part of a PhD research study of the research group "WAVES" of the Department of Information Technology ("the study").

This Privacy Policy is intended to inform you about the processing of personal data that takes place via the MoodApp. This Privacy Policy will tell you what information we collect, how it is used and what your choices are. This Privacy Policy must be read in conjunction with our Cookie Policy, which can be found here: <https://moodapp.ugent.be/CookiePolicy.pdf>.

This Privacy Policy may be modified, for example, in connection with new features on the app or to comply with new legal, contractual or administrative obligations. We therefore recommend that you regularly consult this Privacy Policy. Important changes will be announced on our app. This version of the Privacy Policy was last modified on 25 October, 2021.

1. WHO IS RESPONSIBLE FOR PROCESSING YOUR PERSONAL DATA?

The research group of this research is WAVES which is integrated in both Ghent University and imec. For this research, Ghent University and imec are joint controllers for the processing of your personal data. Ghent University is a Public Institution with Legal Personality under Belgian law, whose registered office is located at Sint-Pietersnieuwstraat 25, 9000 Gent, and which is registered in the Crossroads Bank for Enterprises under number 0248.015.142 ("Ghent University", "we", "us", or "our").

Because Google is used for Firebase and the Google Maps API, Google is the data processor and processes the data like described in their privacy policy: <https://policies.google.com/privacy?hl=en-US>.

2. WHAT PERSONAL DATA DO WE PROCESS?

We collect personal information that you voluntarily provide to us when you decide to participate in the study that uses MoodApp. The aim of the study is the data collection for the research of the relation between context, mood and healthy activities.

The personal data that we collect depends on the context of your interactions with us and MoodApp and the choices you make. The personal data we collect includes the following:

Through MoodApp:

- IP address and User Agent (in no way linked to the other personal data mentioned here)
- Age (in age groups, no specific birth year)
- Height and weight (only the calculated Body Mass Index is stored)
- Employment (distinction between full-time, half-time or other)
- Personal goals for physical activity and life goals
- Big life events during the study (if there are any)
- Data relating to the personality of the participant
- Data relating to the health of the participant (both physical and mental health)
- Data relating to the participant's location during the study (coordinates, location type and weather)
- Data relating to the participant's step count during the study
- Data relating to the participant's physical activities during the study
- Data relating to the participant's mood during the study
- Data relating to the participant's motivation for physical activity
- Data relating to the participant's experience with the app

Through our website (<https://moodapp.ugent.be/>) and all the files distributed through that website, access logs:

- IP address
- Time of visit
- Package information (HTTP header and status code)

For email communication (kept separate from the research data collected through MoodApp):

- Name and title
- Email address
- Description of whether this participant qualifies to receive the incentive (when he or she decided to sign up to receive it after the study): time of finish, failed/succeeded the checks in the questionnaire, finished the study earlier than 21 days or not, submitted physical activities and not only blank information etc. (no information that could link the participant to his or her research data or secret user ID, only the conditions for the incentive)

2.1. Automatically collected data

We automatically collect certain information when you use MoodApp. This information does not reveal your specific identity (like your name or contact information) but may include device and usage information, such as your IP address, location and step count. This information is primarily needed to maintain the security and operation of MoodApp and to collect information to perform the study. These data are collected through the use of cookies and similar tracking technologies. For more information, please see our Cookie Policy which can be found here <https://moodapp.ugent.be/CookiePolicy.pdf>.

- IP Addresses and User Agents – Are logged for all the participants who installed this app on their device. We use the service of Firebase Authentication to allow your device to write to the online database (Firebase Realtime Database). Firebase Authentication collects the IP addresses of the devices on which the app is installed. This way, only the devices of the participants in this study are granted access to the databases. Firebase Authentication uses user-agent strings and IP addresses to provide added security and prevent abuse during sign-up and authentication (<https://firebase.google.com/support/privacy>). When you visit our website (<https://moodapp.ugent.be/>), access logs of your IP address, browser information and time of visit are collected. The access logs are only accessible by the administrator of the website and are only used to verify the functionality and stability of the website. These data will only be kept for the duration of the study, will never be linked to any of your other personal data submitted in this study and will be deleted when the study is finished.
- Location and step data – When given consent to the app to use the GPS and accelerometer sensor in your device, these data are automatically collected for the purpose of the research. Using the GPS, the dataset can contain valuable information about your traveling patterns, the weather conditions at your location (using the service OpenWeatherMap: <https://openweathermap.org/>) and the location type (e.g. public park, public transport, nature) of your locations (using the service OpenCage with option no_record set to 1 which assures no record is kept from the query with your coordinates: <https://opencagedata.com/>). Using the accelerometer, your step count can provide information about your physical activity. In the device's permissions, you can always decide to turn off your consent provided for these sensors. The app also allows you to review the automatically collected data from these sensors. In order to review the data, click the red pin icon in the main screen of the app or read the provided instruction manual. The location history page provides a map where you can see your past location points since your previous submit. We make it possible for you to review and delete your past location points (using Google Maps API: <https://cloud.google.com/maps-platform>). You can click on the point and decide to delete one or all of the points since your previous submit. Once submitted, the location history is sent to the database and new location data will be collected.

3. HOW DO WE USE YOUR PERSONAL DATA?

A distinction is made between the personal data that is submitted in MoodApp, the personal data used for email communication and collected in the access logs of the website.

3.1. Data processing in the context of the app study

In this research, several studies will be conducted with the goal to build a motivational and personalized recommender system to improve both the physical and mental health of the users in a sustainable way.

In this first phase of the research, an observational study will be conducted to study the relationship between the context, mood and healthy activities of a person. MoodApp was developed for this study and collects information about the participants at different times during the day. Both automatic data and manual data are collected:

- Age (in age groups, no specific birth year)
- Height and weight (only the calculated Body Mass Index is stored)
- Employment (distinction between full-time, half-time or other)
- Personal goals for physical activity and life goals
- Big life events during the study (if there are any)
- Data relating to the personality of the participant
- Data relating to the health of the participant (both physical and mental health)
- Data relating to the participant's location during the study (coordinates and derived location type and weather)
- Data relating to the participant's step count during the study
- Data relating to the participant's physical activities during the study
- Data relating to the participant's mood during the study
- Data relating to the participant's motivation for physical activity
- Data relating to the participant's experience with the app

By collecting daily data about the participants' activities and mood through MoodApp, a valuable dataset can be built from which important connections can be made for later research and we can use the healthy activities as recommendations for other people in the final phase of the research. Statistical analysis of the data will provide valuable insights in the relationship between context, mood and healthy activities. Distributing the app among several participants will also contribute to knowledge about the feasibility and motivation of submitting information in the app.

We process your personal data for this purpose based on your explicit consent to participate to the study. You have the right to withdraw your consent at any time at a later stage (for more information, see title **8.1**).

Ghent University makes every reasonable effort to ensure that your personal data remains as secure as possible. As an additional security measure, your personal data submitting through MoodApp is encrypted locally in the app during transmission by AES-256 bit encryption. Datasets and files of the study are also encrypted when stored and shared. The encryption is performed locally on your device before the data is sent to the databases (for more information, see title **4**).

3.1.1. Login

The User Agent and IP address of your device is used to grant your device permission (Firebase Authentication, see title **2.1**) to submit and to write your entered data to the online database (Firebase Realtime Database, see titles **4, 5**). This way, you are automatically logged in when you open the app and you never have to enter a login or password, eliminating storing your name or email address in the app and research datasets.

We process your personal data for this purpose based on your consent to participate to the study and to use the app and on our legitimate interest to provide added security and prevent abuse during sign-up and authentication. You have the right to withdraw your consent at any time at a later stage (for more information, see title **8.1**).

3.2. Data processing in the context of email communication

We process your email address, name and title for the following purposes, based on your consent:

- to answer your questions or remarks when you email us;
- to email your compensation for your participation when you have finished the study and decided to sign up to receive the compensation and send your email address;
- to register you on the mailing list should you sign up to receive the results of the study when the study is over;

We process your personal data for this purpose based on your consent. You have the right to withdraw your consent at any time at a later stage (for more information, see title **8.2**).

Your email address is not part of the research dataset and cannot/will not be linked to your study data.

3.2.1. Email Information

In order to answer your questions if you would have any, send your compensation to you or send the results of the study to you if you would be interested, it is possible that we request personal information from you in order to deliver materials you have requested, respond to your questions or provide information. Please note that email is considered a nonencrypted (and therefore nonsecure) form of communication, and it can be accessed and viewed by others without your knowledge and permission. For that reason, to protect your privacy, please do not use email to communicate information that you consider confidential.

We process your personal data for this purpose based on your consent to handle your questions and requests in the best possible way and to communicate with you. You have the right to withdraw your consent at any time at a later stage (for more information, see title **8.2**).

3.3. Processing of personal data through the website

When you visit our website (<https://moodapp.ugent.be/> and all other subpages thereof), access logs of your IP address, browser information and time of visit are collected. The access logs are only accessible by the administrator of the website and are only used to verify the functionality and stability of the website.

These data will only be kept for the duration of the study, will never be linked to any of your other personal data submitted in this study and will be deleted when the study is finished.

We process your personal data for this purpose based on our legitimate interest to provide added security and prevent abuse for our website.

4. DO WE SHARE YOUR PERSONAL DATA WITH ANYONE?

Only the researchers of the WAVES research group at Ghent University who need the information provided to perform a specific task have access to your personal data. These members are required to attend training on privacy and confidentiality.

Ghent University engages third parties to perform certain (processing) activities such as the developing of the app and the authentication to access the app (Google Firebase Realtime Database and Authentication), collect information about the weather conditions at your location (OpenWeatherMap), about your location (Google Maps) and about the location type of your locations (OpenCage). Ghent University concludes a data processing agreement with the parties that have access to personal data for the performance of their services. The resulting datasets from this study will always be encrypted when stored and shared.

Ghent University has agreed the necessary contractual safeguards by concluding the European Commission's Standard Contractual Clauses. To protect your personal data in accordance with the GDPR, we chose to store your personal data on the servers of the Realtime Database located in Belgium. Furthermore, we took additional protective measures by encrypting all your personal data that are to be stored on the servers of Firebase Realtime Database locally on your device before they are sent to the database. This means that Firebase's Realtime Database does not have access to your unencrypted data. The data from the database can only be decrypted

when downloaded on a work computer with the securely stored password. We also programmed the app so that it generates a unique and secret user ID the first time you open the app that is never linked to the information in Firebase Authentication.

We do not provide any personal data to other parties except when required by law or by court order.

5. DO WE TRANSFER YOUR PERSONAL DATA OUTSIDE THE EUROPEAN ECONOMIC AREA?

Certain service providers of MoodApp (as mentioned in title 4 above) store or transfer your personal data outside the EEA or are able to access your personal data from outside of the EEA for the purposes described in titles 3, 4 above (e.g. the servers of Google Firebase Authentication and Google Maps are located in the US; Google Maps may process personal data in the US). Ghent University is committed to ensuring an adequate and sufficient level of protection for your data, and has in particular agreed the necessary contractual safeguards by concluding the European Commission's Standard Contractual Clauses.

In this respect, Firebase Authentication is used to only allow the device's of the participants in this study to write to the Realtime Database. For this service of Google, the location of the servers cannot be chosen inside the EU, but the only information in these servers will be the IP address and User Agent of your device to make sure your device has access to the Realtime Database. No other connection between your IP address of Authentication and your personal data in the Realtime Database will be made because only the secret user ID that is generated on your device is used in the Realtime Database. Because the use of Authentication, some of your data is still present outside the EU and a data processing agreement with Firebase is in place as a safeguard.

6. HOW LONG DO WE KEEP YOUR PERSONAL DATA?

We will only keep your personal data for as long as it is necessary for the purposes set out in this Privacy Policy, unless a longer retention period is required or permitted by law. No purpose in this Privacy Policy will require us to keep your personal information for longer than 5 years after the research has come to an end.

You have the right to terminate your participation to the study at any time. Upon your request to terminate your account, the app will deactivate or delete your account and personal data from our active databases.

After the study was completed, we provide you with the results of the study if you subscribed to receive the outcome. Afterwards, we delete all personal data from our email communication with you (e.g. emails for communication and questions about the study). Please read the instruction manual if you want to delete certain data or stop the study immediately or to exercise your rights. Also remember to exercise this right to be forgotten before the deadline that was communicated to you on the website. After this deadline, deletion of your submitted data cannot be guaranteed. For more information on how to exercise your rights, see title 8.

7. WHAT ABOUT LINKS TO OTHER WEBSITES AND SOCIAL MEDIA?

The MoodApp contains references (e.g. via hyperlinks to WAVES, Website of Ghent University, OpenCage, OpenWeatherMap, Google Maps) to other websites, which are offered by other companies or by social media. We always advice you to check the privacy policies of those other websites.

8. HOW CAN YOU EXERCISE YOUR PRIVACY RIGHTS?

A distinction is being made between the consent for data submitted in MoodApp and data obtained from the email communications.

8.1. Your privacy rights concerning data submitted in MoodApp

Only the app on your device has access to your secret user ID that was created the first time you opened the app. Before pressing the “Submit” button, you have the opportunity to review, edit and delete both your automatically collected data (like the location history points as explained to you in the instruction manual) and your manually added data (the data you entered through pressing the buttons on the main screen in the app, like your mood and activities of that day). Because all the participants’ data are stored pseudonymized, it is not possible to access or correct the data after you submitted in the app. However, it is possible to delete all your previously submitted data in the app itself because the app has access to that secret user ID. In order to do this, follow the instructions provided to you in the instruction manual before the deadline date communicated to you on the website. If you want to delete your personal data, you have to stop the study and your usage of the app immediately. You have to do these actions for the deletion when the app is still installed on your device. Once the app is deleted from your device, so is that secret user ID and the deletion of your personal data will not be possible anymore. Because all the participants’ data are stored pseudonymized, you cannot request to review, edit or delete your submitted data by sending an email to the researchers.

When the processing of your personal data is based on your consent, you may withdraw your consent at any time. Withdrawal of your consent does not affect the lawfulness of the processing based on consent before withdrawal.

You can withdraw your consent by following the steps of deleting all your previously submitted data before the deadline date as explained in the instruction manual and you don’t have to notify the researchers about your decision. Your data will be removed from the research dataset automatically.

8.2. Your privacy rights concerning data from email communication

You have the right to request free access to the personal data processed by Ghent University, to request the correction or removal of your data or to request a restriction of the processing. You may also request the portability of your data and you may object in a substantiated manner to the processing of your personal data.

When personal data are processed based on your consent, you have the right to withdraw your consent at any time at a later stage.

To exercise the above rights, you can direct your dated and signed request based on the above rights to ine.coppens@ugent.be. Ghent University cannot handle your request without proof of your identity. Please note that the applicable legislation may impose conditions on exercising the above rights.

If you have any questions about the transfer of your personal data outside the EEA or if you want to obtain a copy of the relevant documents, you can send a dated and signed request to Ghent University (cf. contact details under title 9).

You also have the right to file a complaint with the Belgian supervisory authority, which is the Data Protection Authority (“Gegevensbeschermingsautoriteit” / “Autorité de protection des données”). It can be reached by mail at Rue de la Presse 35, 1000 Brussels, and by email at the following email address: contact@apd-gba.be. If you are a resident of a different country than Belgium, you also have the right to lodge a complaint to your local supervisory authority. You can find the contact details of the local supervisory authorities here: http://ec.europa.eu/justice/data-protection/bodies/authorities/index_en.htm.

9. HOW CAN YOU CONTACT US ABOUT THIS PRIVACY POLICY?

If you have questions about this Privacy Policy or concerns on how we process your personal data, please contact us at email address ine.coppens@ugent.be.

You can also contact the data protection officer of Ghent University, Hanne Elsen, via privacy@ugent.be.