Project plan

Team or project name (& acronym if applicable)

Team members
1.
2.
3.
4.
5.

1. RESEARCH PROPOSAL

1.1 Problem

1.2 Solution

1.3 Methodology

1.4 Contribution

1.1 Problem

2. RESEARCH PLANNING

2.1 Work distribution

2.2 Communication, organization, …

2.3 Resources needed

2.4 Potential issues and risks

2.5 Other issues

3. TIME PLANNING

- Fri, May 19, 2023, 23:59   Deadline: project plan

- Tue, May 30, 2023, 11:59   Deadline: presentation slides
- Wed, May 31, 2023, 9:00-12:45   Intermediate presentations (goals see below)

- Fri, Jun 9, 2023, 23:59   Deadline: first part of paper (for peer review)

- Fri, Jun 16, 2023, 23:59   Deadline: peer review

- Fri, Jun 23, 2023, 23:59   Deadline: project report

- Mon, Jun 26, 2023, 23:59   Deadline: presentation slides
- Wed, Jun 28, 2023, 9:00-12:45   Final presentations (& project meeting Wed-Fri)

Goals till May 31 (intermediate presentation):

List them here and address them in your presentation.
The idea is that we can still discuss a plan B if it turns out that your original plans were not feasible.

4. ETHICAL ASPECTS

Ethical issues: …

Provide some short comments here *after you have fill out the ethics quick scan below.*

See here for more information on the survey: https://www.uu.nl/en/research/institute-of-information-and-computing-sciences/ethics-and-privacy. In general, if you marked the boxes shown in green, you should be fine (assuming you follow the related comments carefully). If not, you will likely not be able to do your project as part of this course and need to consider another idea.

Ethics and Privacy Quick Scan (version: 5 September 2022)

Section 1. Research projects involving human participants

		Yes	No
P1	Does your project involve human participants? This includes for example use of observation, (online) surveys, interviews, tests, focus groups, and workshops where human participants provide information or data to inform the research. If you are only using existing data sets or publicly available data (e.g. from Twitter, Reddit) without directly recruiting participants, please answer no.		

If no, continue with Section 2; if yes, fill in the following questions.

Recruitment

		Yes	No
P2	Does your project involve participants younger than 18 years of age?		
P3	Does your project involve participants with learning or communication difficulties of a severity that may impact their ability to provide informed consent?[1]		
P4	Is your project likely to involve participants engaging in illegal activities?		
P5	Does your project involve patients?		
P6	Does your project involve participants belonging to a vulnerable[2] group, other than those listed above?		

If the answer to all of P2-P6 is no, continue with P8.

⚠️ **As you are dealing with vulnerable participants (yes to one (or more) of P2-P6) a fuller ethical review is required.** Please add more detail on your participants here:

		Yes	No
P7	Do you intend to be alone with a research participant or have to take sole responsibility for the participants at any point during your research activity?		

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[1] For informed consent people need to be able to (1) understand information provided relevant to making the consent decision, (2) retain this information long enough to be able to make a decision, (3) weigh the information, (4) communicate the decision.

[2] Vulnerable people include those who are legally incompetent, who may have difficulty giving or withholding consent, or who may suffer highly adverse consequences if their personal data were to become publicly available or from participating. Examples include irregular immigrants, sex workers, dissidents and traumatized people at risk of re-traumatization.

If P7 is no continue with P8, otherwise:

⚠️ **As you will be alone with or solely responsible for vulnerable participants (yes to P7) a fuller ethical review is required. You may also need a Certificate of Conduct (Dutch: VOG) from the government.** Please add more detail here:

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		Yes	No
P8	Does your project involve participants with whom you have, or are likely to have, a working or professional relationship: for instance, staff or students of the university, professional colleagues, or clients?		

If the answer to P8 is yes, please answer P9, otherwise, continue with PC1.

		Yes	No
P9	Is it made clear to potential participants that not participating will in no way impact them (e.g. it will not directly impact their grade in a class)?		

If the answer to P9 is yes, then continue with PC1, otherwise:

⚠️ **As participants may think that not participating may harm them (yes to P8 and no to P9), participation may no longer be voluntary. Hence, a fuller ethical review is required.** Please provide more information here:

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Consent Procedures		Yes	No	Not applicable
PC1	Do you have set procedures that you will use for obtaining *informed* consent from all participants, including (where appropriate) parental consent for children or consent from legally authorized representatives? (See suggestions for information sheets and consent forms on the website[3].)			
PC2	Will you tell participants that their participation is voluntary?			
PC3	Will you obtain explicit consent for participation?			
PC4	Will you obtain explicit consent for any sensor readings, eye tracking, photos, audio, and/or video recordings?			
PC5	Will you tell participants that they may withdraw from the research at any time and for any reason?			
PC6	Will you give potential participants time to consider participation?			
PC7	Will you provide participants with an opportunity to ask questions about the research before consenting to take part (e.g. by providing your contact details)?			

If the answer to PC1-PC7 is yes, then continue with PC8, otherwise:

⚠️ **Given your responses to the informed consent questions (a no on any of PC1-PC7), a fuller ethical review is required.** Please provide more information regarding the questions that are causing this here:

		Yes	No
PC8	Does your project involve concealment[4] or deliberate misleading of participants?		

If the answer to PC8 no, continue with Section 2, otherwise:

⚠️ As you plan to use concealment or misleading (yes to PC8), and this may impact participants' rights to informed consent, a fuller ethical review is required. Please provide more information on the concealment/misleading here:

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[3] uu.nl/en/research/institute-of-information-and-computing-sciences/ethics-and-privacy
[4] This may for example involve concealment of the study aim, of the identity of the researcher, or subliminal messaging during the study.

Section 2. Data protection, handling, and storage

The General Data Protection Regulation imposes several obligations for the use of **personal data** (defined as any information relating to an identified or identifiable living person) or including the use of personal data in research.

		Yes	No
D1	Are you gathering or using personal data (defined as any information relating to an identified or identifiable living person[5])?		

If the answer to D1 is yes, please answer the following questions; otherwise, continue with Section 3.

High-Risk Data

		Yes	No
DR1	Will you process personal data that would jeopardize the physical health or safety of individuals in the event of a personal data breach?		
DR2	Will you combine, compare, or match personal data obtained from multiple sources, in a way that exceeds the reasonable expectations of the people whose data it is?[6]		
DR3	Will you use any personal data of children or vulnerable individuals for marketing, profiling, automated decision-making, or to offer online services to them?		
DR4	Will you profile individuals on a large scale[7]?		
DR5	Will you systematically monitor individuals in a publicly accessible area on a large scale[8] (or use the data of such monitoring)?[9]		
DR6	Will you use special category[10] personal data, criminal offense personal data, or other sensitive personal data[11] on a large scale?		

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[5] This includes people's name, postal address, unique ID, IP address, voice, photo, video etc. When a person can be identified by combining multiple data points (e.g. gender + age + job role), this also constitutes personal data. When a person can be identified by a simple search online (e.g. with the content of a tweet) this also constitutes personal data. Note that Survey tool Qualtrics by default collects IP addresses and that the survey needs to be anonymized before distribution to prevent this.

[6] This is about the combined use of data sets that have been gathered for different purposes (so not within one study), making the data more personal or sensitive. For example, combining participant data with religion or ethnic statistics data from the CBS based on zip code.

[7] Large scale is for example thousands of people, all visitors to a university website, data obtained over a very large time span

[8] Large scale is for example thousands of people, all visitors to the area, data obtained over a very large time span

[9] This may also include camera surveillance and use of drones

[10] Special category personal data is information about a person's health, ethnic origin, politics, religion, trade union membership, genetics, biometrics (where used in identification), sex life or sexual orientation.

[11] Other sensitive personal data includes for instance financial data (from which people's income, capital position or spending patterns can be derived), location data (from which people's movement patterns can be derived), achievement data (e.g. outcome of course work/exams, intelligence test; this excludes performance on tasks in a research study that are unrelated to their study/job), and communication data.

		Yes	No
DR7	Will you determine an individual's access to a product, service, opportunity, or benefit[12] based on an automated decision or special category personal data?		
DR8	Will you systematically and extensively monitor or profile individuals, with significant effects[13] on them?		
DR9	Will you use innovative technology[14] to process sensitive personal data[15]?		

If the answer to DR1-DR9 is no, continue with DM1, otherwise:

⚠️ **As high-risk data processing seems involved (yes to any of DR1-DR9), a fuller privacy assessment is required.** Please provide more information on the DR1-DR9 questions with a yes here:

Data Minimization

		Yes	No
DM1	Will you collect only personal data that is strictly necessary for the research?		

If you answered yes to DM1 continue with DM4, otherwise:

		Yes	No
DM2	Will you only collect not strictly necessary personal data because it is (1) technically unfeasible not to collect it when collecting necessary data[16], or (2) needed as a source of necessary data[17]?		
DM3	Will you (1) extract any necessary data as soon as possible from the collected not strictly necessary data and (2) delete the not strictly necessary data immediately after any required extraction?[18]		
DM4	Will you anonymize the data wherever possible?[19]		

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[12] Examples include: access to a mortgage, insurance, credit card, smartphone contract, course or degree programme, job opportunity.

[13] Significant effects are for example impacts on somebody's legal rights, automatic refusal of a credit application, automatic rejection for a job application.

[14] Innovative technology includes e.g. machine learning (including deep learning), neuro measurement (e.g. brain activity), autonomous vehicles, deep fakes, wearables, blockchain, internet of things.

[15] Sensitive personal data includes all data mentioned in DR6.

[16] This may for instance occur when IP data is collected automatically in Qualtrics, and it is unfeasible not to do so as other personal data such as email needs to be collected.

[17] This may, for instance, occur when audio data is captured from which audio features need extracting or a transcript needs to be produced.

[18] This may for instance happen when you collect audio data, extract audio features or transcribe an audio interview as soon as possible, and delete the original audio recording once done.

[19] Possible also means given the research question. So, for example, if you have done interviews and you need to be able to at a later date link them to performance data, it is impossible to anonymize the interviews, and you will need to pseudonymize them. You can then answer yes to DM4 as you are anonymizing where it is possible, and

DM5	Will you pseudonymize the data if you are not able to anonymize it, replacing personal details with an identifier, and keeping the key separate from the data set?		

If the answer to any of DM2-DM5 is no, see warning below, otherwise continue with DC1.

⚠️ **As you do not seem to minimize data collection (no to any of DM2-DM5), a fuller privacy assessment is required.** Please provide more information on the DM2-DM5 questions with a no here:

Using Collaborators or Contractors that Process Personal Data Securely

			Yes	**No**
DC1	Will any organization external to Utrecht University be involved in processing personal data (e.g. for transcription, data analysis, data storage)?			

If the answer to DC1 is yes, please complete DC2 otherwise continue with DI1.

		Yes	**No**
DC2	Will this involve data that is not anonymized?		

If the answer to DC2 is yes, please complete DC3-DC5, otherwise continue with DI1.

		Yes	**No**	**Not Applicable**
DC3	Are they capable of securely[20] handling data?			
DC4	Has been drawn up in a structured and generally agreed manner who is responsible for what concerning data in the collaboration?			
DC5	Is a written contract covering this data processing in place for any organization which is not another university in a joint research project?			

If the answer to any of DC3-DC5 is no, see warning below, otherwise continue with DI1.

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yes to DM5 if indeed you pseudonymize. Note that in such a case you should anonymize once the linking has been done, destroying the key that links the pseudonym to the identity of the participant.

[20] Secure handling includes for example: (1) only sharing data with those who legitimately need to see it, (2) data being securely stored on password-protected employer authorized IT systems (or in the case of non-digital data: in a secure locked location), (3) if portable devices such as USB sticks are used then only encrypted and password protected with data deleted as soon as it is no longer required to be portable, (4) reporting lost or stolen data immediately, (5) deleting or disposing of data as soon as it is no longer required and in a secure manner, (6) not discussing sensitive data in public places, (7) only carrying needed data when working off-site.

⚠️ **As you do not seem to have appropriate processes in place for sharing data with collaborators or contractors (no to any of DC3-DC5), a fuller privacy assessment is required.** Please provide more information on the DC3-DC5 questions with a no here:

[ ]

International Personal Data Transfers

		Yes	No
DI1	Will any personal data be transferred to another country (including to research collaborators in a joint project)?		

If the answer to DI1 is yes, please complete DI2, otherwise continue with DF1.

		Yes	No
DI2	Do all countries involved in this have an adequate data protection regime?[21]		

If the answer to DI2 is no, please complete DI3, otherwise continue with DF1.

		Yes	No
DI3	Is a legal agreement in place?		

If the answer to DI2 and DI3 is no, see warning below, otherwise, continue with DF1.

⚠️ **As you do not seem to have appropriate safeguards in place for international data transfers (no to DI2 and DI3), a fuller privacy assessment is required.** Please provide more information on intended international data transfers here:

[ ]

Fair Usage of Personal Data to Recruit Participants

		Yes	No
DF1	Is personal data used to recruit participants?[22]		

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[21] Countries with an adequate data protection regime include EU countries, Andorra, Argentina, Canada (only commercial organizations), Faroe Islands, Guernsey, Israel, Isle of Man, Jersey, New Zealand, Switzerland, Uruguay, Japan, the United Kingdom, and South Korea.

[22] Intended here is the direct use of personal data to target a specific person. If you are using personal data indirectly to address a group of people, for example, sending a message via a *pre-existing* Microsoft Team, Blackboard course, Discord Channel, WhatsApp group, or crowd-sourcing platform, that is fine and will not be regarded as the use of personal data here. If you are asking friends or family members this will also not be regarded as use of personal data here.

If the answer to DF1 is yes please answer DF2-DF4, otherwise continue with DP1

		Yes	No
DF2	Have potential participants provided this personal data voluntarily to be contacted about the research or is the data publicly available?		
DF3	If contact details have been provided by a third party, would participants expect their details to be passed on to the university and to be used in this way?		
DF4	If contact details have been gathered for a purpose other than research, would participants expect their details to be used in this way?		

If the answer to DF2-DF4 is yes continue with DP1, otherwise:

⚠️ **As there seem to be issues with your use of personal data for recruitment (no to one or more of DF2-DF4), a fuller privacy assessment is required.** Please provide more information on the intended use of personal data for recruitment here:

Participants' data rights and privacy information

		Yes	No	Not Applicable
DP1	Will participants be provided with privacy information? (Recommended is to use as part of the information sheet: For details of our legal basis for using personal data and the rights you have over your data please see the University's privacy information at www.uu.nl/en/organisation/privacy.)			
DP2	Will participants be aware of what their data is being used for?			
DP3	Can participants request that their personal data be deleted?[23]			
DP4	Can participants request that their personal data be rectified (in case it is incorrect)?			
DP5	Can participants request access to their personal data?			
DP6	Can participants request that personal data processing is restricted?			
DP7	Will participants be subjected to automated decision-making based on their personal data with an impact on them beyond the research study to which they consented?			
DP8	Will participants be aware of how long their data is being kept for, who it is being shared with, and any safeguards that apply in case of international sharing?			

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[23] This only concerns requests for personal data that you still hold. If you can no longer link the data to a participant due to anonymization, you can no longer delete it. This should be clear to participants in the consent form. If the data is pseudonymized and you cannot access the key but the participant can (for example when the key is a WorkerID from a crowd-sourcing platform), participants should be able to request deletion on the provision of the key.

DP9	If data is provided by a third party, are people whose data is in the data set provided with (1) the privacy information and (2) what categories of data you will use?			

If the answer to DP1-DP6, DP8, DP9 is yes and DP7 is no, continue with DE1, otherwise:

⚠️ **As there seem to be issues with the data rights of your participants or the provision of privacy information (no to one or more of DP1-DP6, DP8, DP9, or yes to DP7), a fuller privacy assessment is required.** Please provide more detail regarding data rights and/or privacy information here:

Using data you have not gathered directly from participants

		Yes	No
DE1	Will you use any personal data[24] that you have not gathered directly from participants (such as data from an existing data set, data gathered by a third party, data scraped from the internet)?		

If the answer to DE1 is no please continue with DS1.

		Yes	No
DE2	Will you use an existing dataset in your research?		

If the answer to DE2 is yes please answer DE3-DE5, otherwise, continue with DE6.

		Yes	No
DE3	Do you have permission to do so from the owners of the dataset?		
DE4	Have the people whose data is in the data set consented to their data being used by other researchers and/or for purposes other than that for which that data set was gathered?		
DE5	Are there any contractual conditions attached to working with or storing the data from DE2?		

		Yes	No
DE6	Does your project require access to personal data about participants from other parties (e.g., teachers, employers), databanks, or files[25]?		

If the answer to DE6 is yes please answer DE7-DE8, otherwise, continue with DE9.

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[24] Defined as any data related to an identified or identifiable living person. This includes people's name, postal address, unique ID, IP address, voice, photo, video etc. When a person can be identified by combining multiple data points (e.g. gender + age + job role), this also constitutes personal data.

[25] For example, do you get a student's grade from the teacher, in addition to data gathered directly in your study or data in an existing research data set?

		Yes	No
DE7	Do you have a process in place to gain informed consent from these participants?		
DE8	Are there any contractual conditions attached to working with or storing the data from DE5?		

		Yes	No
DE9	Does the project involve collecting personal data from websites or social media (e.g., Facebook, Twitter, Reddit)?		

As there may be issues with the use of existing data (no to DE3, DE4, DE7 or yes to DE9), a fuller privacy assessment is required. Please provide more detail regarding the use of existing data here:

Secure data storage

		Yes	No
DS1	Will any data be stored (temporarily or permanently) anywhere other than on password-protected University authorized computers or servers?[26]		

If the answer to DS1 is yes, please answer DS2, otherwise, continue with DS4.

		Yes	No
DS2	Does this only involve data stored temporarily during a session with participants (e.g. data stored on a video/audio recorder/sensing device), which is immediately transferred (directly or with the use of an encrypted and password-protected data-carrier (such as a USB stick)) to a password-protected University authorized computer or server, and deleted from the data capture and data-carrier device immediately after transfer?		

If the answer to DS2 is yes, continue with DS4, otherwise answer DS3.

		Yes	No
DS3	Does this only involve data stored with a collaborator or contractor?		

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[26] OneDrive business, Qualtrics, Microsoft Forms are ok. Do not use Google Drive/Sheets/Docs/Forms, Dropbox, OneDrive personal. See https://tools.uu.nl/tooladvisor/ for tools that are safe/not safe to use. Bachelor and master students are authorized to use a password-protected personal computer, as long as that computer is not shared with other people.

DS4	Excluding (1) any international data transfers mentioned above and (2) any sharing of data with collaborators and contractors, will any personal data be stored, collected, or accessed from outside the EU[27]?		

If the answer to DS2 and DS3 is no, or the answer to DS4 is yes, see the warning below, otherwise continue with Section 3.

As there may be issues with secure data storage (no to DS2 and DS3, or yes to DS4), a fuller privacy assessment is required. Please provide more detail regarding data storage here:

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[27] This may happen, for instance, when data is collected and stored on a Utrecht University laptop whilst abroad.

Section 3. Research that may cause harm

Research may harm participants, researchers, the university, or society. This includes when technology has dual-use, and you investigate an innocent use, but your results could be used by others in a harmful way. If you are unsure regarding possible harm to the university or society, please discuss your concerns with the Research Support Office.

		Yes	No
H1	Does your project give rise to a realistic risk to the national security of any country?[28]		
H2	Does your project give rise to a realistic risk of aiding human rights abuses in any country?[29]		
H3	Does your project (and its data) give rise to a realistic risk of damaging the University's reputation? (E.g., bad press coverage, public protest.)		
H4	Does your project (and in particular its data) give rise to an increased risk of attack (cyber- or otherwise) against the University? (E.g., from pressure groups.)		
H5	Is the data likely to contain material that is indecent, offensive, defamatory, threatening, discriminatory, or extremist?		
H6	Does your project give rise to a realistic risk of harm to the researchers?[30]		
H7	Is there a realistic risk of any participant experiencing physical or psychological harm or discomfort?[31]		
H8	Is there a realistic risk of any participant experiencing a detriment to their interests as a result of participation?		
H9	Is there a realistic risk of other types of negative externalities?[32]		

If the answer to H1-H9 is no continue with Section 4, otherwise:

> ⚠️ **As you replied yes to one (or more) of H1-H9, a fuller ethical review is required.** Please provide more detail here on the potential harm, and how you will minimize risk and impact:

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[28] For example, research that can be used for autonomous armed vehicles/drones/robots, research on automated detection of objects, research on AI-enhanced forgery of video/audio data.

[29] For example, research on natural language/video/audio processing for automated identification of people's identity, sentiments, or opinions.

[30] For example, research that involves potentially violent participants such as criminals, research in likely unsafe locations such as war zones, research on an emotionally highly challenging topic, research in which the researcher is alone with a not previously known participant in the participant's home.

[31] For example, research that involves strenuous physical activity, research that stresses participants, research on an emotionally challenging topic.

[32] A negative externality is a harm produced to a third party, society in general, or the environment. For instance, intended or unintended negative ethical (e.g. bad governance or management practices), social (e.g. consumerism, inequality) or environmental effects (e.g. large CO_2 footprint or e-waste production) of your project.

Section 4. Conflicts of interest

		Yes	No
C1	Is there any potential conflict of interest (e.g. between research funder and researchers or participants and researchers) that may potentially affect the research outcome or the dissemination of research findings?		
C2	Is there a direct hierarchical relationship between researchers and participants?		

If the answer to C1-C2 is yes, continue with Section 5, otherwise:

⚠️ **As you replied yes to C1 or C2, a fuller ethical review is required.** Please provide more information regarding possible conflicts of interest and how you mitigate them here:

Section 5. Your information

This last section collects data about you and your project so that we can register that you completed the Ethics and Privacy Quick Scan, sent you (and your supervisor) the summary of what you filled out, and follow up where a fuller ethics review and/or privacy assessment is needed. For details of our legal basis for using personal data and the rights you have over your data please see the University's privacy information. Please see the guidance on the ICS Ethics and Privacy website on what happens on submission.

Z0. Which is your main department?
- ○ Information and Computing Science
- ○ Freudenthal Institute
- ○ Other, namely:

Z1. Your full name:

Z2. Your email address:

Z3. In what context will you conduct this research?
- ○ 1. As a student on a course with course coordinator:
- ○ 2. As a student for my bachelor thesis, supervised by:
- ○ 3. As a student for my master thesis, supervised by:
- ○ 4. As a PhD student, supervised by:
- ○ 5. As an independent researcher (e.g. research fellow, assistant/associate/full professor)

In case the answer to Z3 is 2:
Z4. Bachelor programme for which you are doing the thesis:
- ○ Artificial Intelligence (Kunstmatige Intelligentie)
- ○ Computing Science (Informatica)
- ○ Information Science (Informatiekunde)
- ○ Other:

In case the answer to Z3 is 3:
Z5. Master programme for which you are doing the thesis:
- ○ Applied Data Science
- ○ Artificial Intelligence
- ○ Business Informatics
- ○ Computing Science
- ○ Data Science
- ○ Game and Media Technology
- ○ Human-Computer Interaction
- ○ Other: