

**Module 5- Computer Systems (2023-24)
Project**

UNIVERSITY OF TWENTE.

TEAM CONTRACT

Team ID: 9

Project Title: Bird Activity Detection

Mentor(s): Denis Krylov, Reneta Trifonova

1. Team information and their roles (What are the convenient Belbin roles for you? Mention at least 2 roles)

The Belbin roles are Resource Investigator, Team-worker and Co-ordinator (the Social roles); Plant, Monitor Evaluator and Specialist (the Thinking roles), and Shaper, Implementer and Completer Finisher (the Action or Task roles) (refer to the link for a better understanding:

<https://www.belbin.com/about/belbin-team-roles>)

			Grade expectations					
Name of the Team member	Preferred roles (Belbin)	Reason to select your preference (Any special expertise on your preference?)	Minimum grade	Expected grade	Preferrable day, time, and place to have extra meetings	Scrum Master (Sprint number)	Security officer (Sprint number)	Preferred method of communication for project discussion/informing any relevant updates to your team.
Luca Fuertes	Complete Finisher	I can write high-quality reports relatively quickly.	6.5	8	Anytime except for during university activities is fine.	Sprint 1	Sprint 2	We should be meeting in-person regularly, however I am also open to working online. Discord and WhatsApp is my preferred method of communication.
	Plant	I take more of an interest in back-end programming than other roles, so that would suit me better.						
	Specialist							

Thomas van der Boon	Implementer	<p>My English is excellent and I am pretty alright at finding things to write about. I did the front end in module one and 4so I have a greater knowledge of that.</p> <p>My code writing ability has improved vastly over the past year so i'm rather confident in that as well.</p>	5.5	8	Anytime is fine. I just need some sleep and preferably not during university time such as lectures	Im good anytime. Sprint 1	Sprint 3 or 4	Any form is fine with me. At least 1 in-person meeting per sprint session to ABSOLUTELY make sure everyone is on the same page.
	Coordinator							
	Team worker							
Dimitri von Benckendorff	Implementer	<p>I am quite alright at reviewing. More so than writing as I overthink.</p> <p>I enjoy programming. Experience in No experience in Raspberry Pi. No preference for frontend over backend or anything. Very excited to create a cool product.</p>	7	8.5	I'm busy every morning but I can join in the afternoons on weekdays. I could join some evenings if need be.	Sprint 2 and 3 are OK for me	Sprint 4 (after W4)	<p>Remote comms in our WhatsApp group. Discord is alright but not my preferred comms medium.</p> <p>I enjoy in-person working sessions.</p>
	Monitor Evaluator							
	Specialist							
Carmen Asbreuk	Teamworker	<p>In my previous study I always performed the programming/data tasks, but with this study I do not yet know. I would like to try</p>	6.5	8	I don't like working late but during the day I am available quite a lot	Doesn't matter	Anytime is good	Whatsapp, I am horrible with discord. Next to this physical meetings work the best for me, also when working on the project I like working on it 'together'
	Specialist							
	Shaper							
Dinh Thuy Nhat Vy	Complete Finisher	I'm a perfectionist person and being mostly	7.0	8.3	Anytime works for me.	Weeks 10-11	Any time is good	I prefer in-person meetings more than online ones,

	Implementer	meticulous to every detail, that's why I prefer formatting and writing the reports. Moreover, I think that back-end programming fits me more than front-end one.						probably at least 1-2 meetings per week. However, in case it's hard for everyone to arrange an in-person meeting, especially near the tests, then online meeting also works for me.
	Monitor Evaluator							
Duong Thu Huyen	Coordinator	I think back-end programmer is the best choice for me	6.0	8.5	Anytime works for me regarding weekends, except for sleeping time and rest time.	It's fine to me and up to another members	Sprint 3	I like face-to-face meetings more than chatting or online video calls . However, if the weather is not good or some guys meet problems with their health, online is the best choice.
	Complete Finisher	I am a perfectionist person that's why i think completer suits to me (cleaning code, formatting report)						
	Team Worker							

2. Project Goals (Mention at least 5)

What are your team goals for the project? What do you want to achieve? What skills do you want to improve or work?:

Goal	Specific	Measurable	Attainable	Relevant	Time-bound
Produce a product that meets the requirements and later exceeds them greatly if the time allows for it.	Our team aims to develop a system with hardware and software components that is useful for an intended audience and of interest to the team.	Our team aims to develop a system that complies with all requirements as will be described in the Requirement Analysis Document.	Our team aims to develop an MVP through the implementation of functional and security features before nonfunctional features that will be described in the RAD.	Our team wants to gain experience in the development of a system that has hardware and software components.	Our team aims to develop this system in 4 weeks. We will structure the project in the weeks before starting on the development of our system.
Achieve success in the	We each want to pass the	We all aim to achieve at	We will collaborate	So we don't have to redo	We will be working on this

project, while balancing the other activities of module 5.	entirety of module 5 successfully.	least our minimum expected grade mentioned in the team contract, while also passing the other components of module 5.	together effectively and complete work in a timely manner to achieve our minimum expected grade	parts of module 5. A good grade is an indicator that we succeeded in the project.	goal throughout the duration of the project (8 weeks).
Make use of sensors that enable the capture of images/video, and store this remotely in a database.	Our team will use sensors such as cameras to take pictures of birds, and upload these to a database.	The system will make use of at least 1 camera, and other sensors such as a knock sensor to detect a bird, and a microphone to listen for bird sounds.	We will request the appropriate sensors by filling out the form and sending it to our mentors.	The sensors such as a camera and microphone will allow us to collect images and audio, so it's species can be determined. It also satisfies the real-time aspect of the project.	Our team aims to complete development in 4 weeks, but we want to first begin testing and configuring the sensors during week 1.
Classify the captured images or video.	Our team aims to classify specific object(s) in captured media as described in the project idea.	Our team aims to classify objects at a 95% accuracy and we want to minimize the false positive ratio of the tool, such that the outputs are useful for our purposes and analysis by the intended audience.	Our team aims to use an existing classification tool that can be implemented for our specific case using transfer learning. This will reduce the time from project idea to launch since the base model is already useful for object detection in media.	The captured images that contain a classified object are to be stored and shown.	Our team aims to develop this tool in 4 weeks in parallel with other project activities. During this timeframe, we will explore, refine, and deploy the machine learning model.
Develop an online web interface where the images can be viewed.	Our team will develop a web interface, where users can view collected images as well as metadata about the birds.	This goal is attained when the MVP is achieved or when all project requirements regarding the database have been satisfied.	We will use software such as Java and Jersey to implement RESTful services for our web application. HTML and CSS will make up the front end.	Some kind of interface a requirement for the project. We chose a web interface due to its convenience and audience of our system.	Our team aims to develop the web interface over the course of 4 weeks.

3. Team Expectations (Mention at least 3 for each of the criteria)

What do you expect from the team members for the a) Participation, b) Meetings, c) Communication, d) Conduct, and e) Conflict

a) Participation (What is your group planning for team participation?):

As a project team, we agree to participate in all decided upon meetings unless an urgent situation arises. *Exceptions could include online participation in certain cases.*

We agree to ask for support from team members when needed, and provide support when necessary.

We agree that everyone completes their assigned task to the best of their abilities. This includes ensuring that the deadline is met.

b) Meetings (What is your expectation from the team for the team meetings?):

As a project team, we agree to participate in at least one in-person meeting every week.

We agree to arrive at all meetings on time and inform the team of any possible delay. *If you cannot participate in a scheduled meeting, for any reason, do inform the team of your work and struggles.*

We agree to prepare for and structure the meetings in order to attain our goals.

c) Communication (How do you communicate with each other? Any rules for communication?):

As a project team, we agree to respond to online communications (either WhatsApp or Discord) in a timely manner (1-3 days).

We agree to ask for help if we encounter a roadblock or struggle while working on the assigned task.

We agree to be respectful and mindful of peoples struggles and ideas.

d) Individual Accountability (What is your expectation level for each individual in your team for fulfilling team assignments, tasks, and accomplishing deadlines?):

As a project team, we agree that if deadlines are not adhered to, and no prior warning to the delay was given, then a warning will be issued. A second warning would result in one of the cards.

We shall actively use Trello after each meeting or accomplishment of a task, to ensure that everyone is up to date on each other's work progress.

All participants shall bring a reasonable update to each of the meetings.

e) Conduct (How do you follow the degree of professionalism within the team and how do you manage if any of the team members doesn't follow the conduct or fails to fulfill expectations?):

As a project team, we will demonstrate integrity.

We will treat everyone with respect.

We will celebrate each other's accomplishments.

f) Conflict (How do you handle or how will you react to team conflicts?):

As a project team, we agree to listen actively and let everyone in the group have a chance to air out their views without favoring the other.

After investigating the issue and determining the best way to resolve it, we agree that everyone should take their own responsibility to resolve the conflict.

In the case that we cannot find the solution to a problem, we agree to discuss it with our project mentor.

4. Team Agreements (These are the final 10 commitments/rules for your team that you agreed on together and promise to follow these rules during the project (Computer Systems, Module 5)).

I undersigned, hereby declare that I have read, agreed, and accepted all the rules and commitments mentioned in this document and will try my best to follow these rules during the project (Computer Systems, Module 5). If the rules are not being followed by us, we will bear the consequences as

mentioned.

Commitments (C)	A signal on your commitments (Yes/No)						Team Member's Signature
	Luca Fuertes	Thomas van der Boon	Dimitri von Benckendorff	Carmen Asbreuk	Dinh Thuy Nhat Vy	Duong Thu Huyen	
As a team member, I promise to do my best to achieve the team goals.	Yes	Yes	Yes	Yes	Yes	Yes	Luca Fuertes
As a team member, I agree to collaborate and share resources with other team members to achieve the team goals.	Yes	Yes	Yes	Yes	Yes	Yes	
As a team member, I am committed to being open to dialogue and constructive criticism.	Yes	Yes	Yes	Yes	Yes	Yes	Thomas van der Boon
As a team member, I agree to act with integrity and not to commit fraud.	Yes	Yes	Yes	Yes	Yes	Yes	
As a team member, I am committed to working with the team and helping	Yes	Yes	Yes	Yes	Yes	Yes	Dimitri von Benckendorff

understood and accepted
all aspects of this contract

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