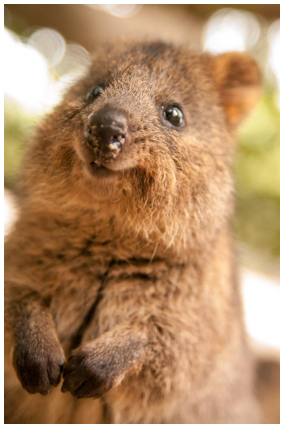
Sprint Retrospective

Iteration 2

Project	Stereotypes in CS
Group	10D

Done	Partially done	Not done	Removed

User Story	ID	Status
As a user, I can complete different quiz questions	1	
As a user, if my test shows a inclination towards a certain stereotype I want to be shown a video / article about computer science	2	
As a project owner, I want the data to be securely stored in the database according to GDPR regulations	3	
As a project owner I want to be able to keep track of the relative answer time for some questions in order to analyze the answers	4	
As a project owner, I want the user data gathered during a session to be removed at the end	5	
As a user, I want to see my results after taking the IAT	6	
As a participant, I want to take the test on a laptop that has become available after the consent form has been completed	7	
As a project owner, I want a specific quiz format	8	



As a person responsible with managing the study, I want to be able to stop a test in the case a participant decides to leave	**9**	
Tasks that are not necesarrily related to a user story, but which are important for the whole devolpment process	**10**	
As the project owner, I want to be able to see intermediate results via a separate dashboard	**11**	
As the project owner, I want to be able to add/remove/edit questions by using a graphical interface	**12**	

User Story	Task	Assigned to	Estimated effort (hours per person)	Actual effort (hours per person)	Done	Notes
1, 8	Load data from server	Andrei & Dragos	3	6	Yes	Client-dissemination-application successfully loads data from the server It took a bit longer than expected because a lot of planning and discussion between the two sides (client and server) to match both team's needs. Thanks to good team communication we succesfully implemented the loading
1, 3, 4	Send completed data to the server	Andrei & Dragos	4	4	Yes	Client-dissemination-application successfully sends data to the server. It involved high effort as we needed to change variable names to perfectly match the server needs
10	UI and UX improvements	Andrei & Dragos	5	10	Yes	Client-data application styled. Required multiple attempts. Faced numerous graphical bugs and glitches However, we have focused on quality and we consider the work well-done
1	Allow multiple children in the consent form	Andrei & Dragos	3	3	Yes	A parent can register multiple children for the experiment.
1, 3, 7	Queue Management system	Everyone	10	8	Yes	Fully functional que management; users can sign up and their name will be shown on each available device. We manually tested it.
1, 9	Terminate the quiz prematurely	Dragos	2	3	Yes	A user can quit its current test without storing any of the results.This feature have been more difficult than expected because it involved changes in key places in the code. The feature still has a bug which is scheduled to be solved in sprint 3
10	Test front-end using Enzyme	Andrei	2	1	Yes	Basic tests are currently implemented, but significant effort is required to ensure proper validation.
10	Integration tests client-application	Andrei & Dragos	3	6	Yes	Estimated effort is higher because Andrei also attempted to do this task. Eventually we tested login with mocks

10	Refactor code	Andrei & Dragos	3	3	Yes	Code refactoring. Usually, as codebase grows we observe similarities between React components and we reuse code. Because the similarity is initially not obvious, we need refactoring sessions once a week.
10	Write documentation	Andrei & Dragos	1	1	No	The application requires more documentation. We will do this within the first days of the following sprint
3, 7	Data collection queue management	Alex & Alin	4	9	Yes	For a smoother process we have implemented a queue management system. Once a consent form is completed, a participant is appended to a queue. The first person in the queue goes to an available laptop and his or her name is desplayed. We have spent more time on this than we thought because of some bugs that we have encountered. Some ours, some from the libraries used which haven't been fixed so we had to change.
1, 8	Create quiz factory	Alex & Alin & Ionut	7	9	Yes	In order to make it easier for the project owner to change the format of the whole test we have created a quiz factory. We can then specify a format in a file and using the quiz factory create a quiz with the information from that file. For the future sprint we want to add an interface for the project owner to easily create such files.
1, 8	Send questions to data collection application	Alex & Alin & Ionut	4	3	Yes	Store all questions in the database and create an endpoint that returns a quiz created using the quiz factory.
1, 3, 8, 10	Refactor database schema	Alex & Alin & Ionut	2	6	Yes	We went through several iterations of different schemas in order to find the one that best suited our needs.
1, 8	Insert data-collection object into db (quiz answers)	Alex	4	1	Yes	At the end of the test, the frontend sends user's ansers to the backend in the form of a JSON object. The backend validates the structure of the object and stores it accordingly into the database.
1, 3, 8	Setup database classes for IAT	Ionut	3	8	Yes	Writing SQLAlchemy code for the database classes, migrating the database and testing the migrations locally.
3	Setup Cloudinary	Alex & Alin	2	1	Yes	Change from storing images as base64 string in the database, to upload them to a image hosting service (Cloudinary) and storing only the links in the database. Makes it easier to change an image in the future if necessary (just update a link)
1, 8	Store final quiz questions in the database	Alex & Alin & Ionut	5	6	Yes	Created some functions that can create and store different phases for IAT's in the database based on categories. Also wrote some scripts that will populate the database with the questions that we have so far for testing purposes.
10	Improve static analysis scores & code cleanup	Alex & Alin & Ionut	2	2	Yes	Write tests for the newly added functionalities and properly comment the code

11	Add endpoints for querying general information from the database.	Alex & Alin & Ionut	6	0	No	Not started yet, other tasks had higher priority this sprint. Doing this task in the next sprint will be easy thanks to code written this sprint.
6	Add authentication and authorization for data dissemination application	Entire Team	3	0	No	During the sprints, changes in client requirements (usually agreed during meetings) have determined us to give priority to other stories
6	Send emails with IAT results from server to participant	Alex & Alin & Ionut	6	0	No	Not started yet, other tasks had higher priority this sprint.
10	Editing and uploading meeting notes	Ionut	2	2	Yes	

*Technical writing assignments, meetings and other organizational tasks are not included in the retrospective

Main Problems Encountered

Problem 1 ***Missing final quiz questions***

Description The actual content of the IAT test is missing. We hope that the reasearchers can provide it before the next week's pilot presentation.

Reaction This had obviously a negative effect on the development of our application, since we have to deal with uncertantly regarding the requirements.

Problem 2 ***Uncertantly about requirements***

Description Similar to previous sprint, there were plently of questions that remained to be answered. We had to wait during the weekend so that we can aks on Monday, 25 May

Reactions Team members had to cooperate more in order to make sure that we understand the requirements. This involved multiple additional meetings

Problem 3 ***Miscomunication between the two groups***

Description Due to a miscomunication between the front-end and the back-end, there have been a few issues regarding the parsing of the JSON object retrieved from server.

Reactions We had to explain each other the reasons for the changes. In the end we came to an agreement, but involved a few more hours of work.

Problem 4 ***Time estimation for certain tasks***

Description In the planning for Sprint 2, we came up with some tasks regarding the database schema, which caused us to set the time estimate of other related tasks to more time than it would actually take.

Reactions Some tasks took less time than the estimated time entered in GitLab.

Problem 5 ***Database design - IAT questions***

Description The initial design did not seem to work with IAT questions in an efficient way.

Reactions We had to refactor the database schema to fit the IAT questions better.

Problem 6 ***Database design - Test structure***

Description We had doubts about quiz questions and answers formats and how we should store the quiz structure. (flexibility vs maintainability vs consistency vs efficiency)

Reactions It became more clear after the meeting with the client. (knowing exactly what the client wants)

Adjustments for next Sprint Plan

1. Communicate more with the client and try to understand all the requirements in advance.
2. Ask for specific quiz questions (e.g. images) for pilot presentation.
3. Communicate more between the team members when making significant (braking) changes.
4. Write even more documentation. (Ex: README for the whole application, explaining database design choices)
5. Take into account that we have a pilot at the end of the sprint's first week. We should prioritise those issues.
6. With the deadlines for the reports approaching we may have to add the specific assignments as part of our sprint planning to make sure we spent the right amount of time on them.