Code of Conduct - Group 59

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1 SHARED TEAM VALUES

First and foremost, the most significant team values that we represent are mutual respect and inclusion. No matter the discrepancies between knowledge, skill and intellect, we must always seek to find the best value every member brings to the group and everyone's voice is heard. This helps every member grow, feel included when developing these tasks and makes the working environment feel like a safe space and prone to evolution.

The next values are innovation and creativity. What we are looking to achieve by the end of this project is not only a basic application but rather exploring and finding new ideas and technology and finding unique ways to solve problems. Not only does it allow us to build up critical thinking, but also understand what we are working on and makes the addition of changes much more feasible.

Two more important factors are agility and flexibility. Since the workload is complicated to comprehend at first and the information is new for everyone, we have to be able to adapt on the go. This takes a lot of focus, rapid learning and also deep understanding of what we are trying to create. Each week represents a new challenge, having to come up with fresh ideas for every feature we are striving to implement.

Last but not least we have integrity and transparency. It is of utmost importance to maintain honesty between us and gain trust in each other. Trust is fundamental when we are in an environment that pressures everyone since we need to be together in both our worst and best moments. Thus, we can create a workspace that allows us to transcend the ideology of a university project and feel like we are in an actual company, developing our next new feat.

2 ASSIGNMENT DESCRIPTION

The team aims to:

(1) Create a client-server application using JavaFX and Spring Boot. The application will:
   (a) Enable users to split expenses for events between multiple participants, and manage their debts to each other
   (b) Allow an administrator to manage their application backend instance
   (c) Be unit tested to automatically ensure functional correctness
   (d) Use both long polling and websockets for client-server communication
   (e) Utilize dependency injection in Guice
   (f) Be user-friendly, which will be achieved by applying user experience and accessibility principles
(2) Implement all specified additional features based on user stories and stakeholder requirements, such as:
   (a) Live Language Switch - switching languages in the application
   (b) Detailed Expenses - splitting expenses with a subgroup, partial debt settlement
   (c) Foreign Currency - tracking expenses in foreign currencies
   (d) Open Debts - determining transfer instructions to settle all debts
   (e) Statistics - tagging expenses, basic expense statistics, and visualization
   (f) Email Notifications - sending payment reminders by email
(3) Apply collaborative software engineering principles by:
   (a) Utilizing Git for version control and to enable easier merging of contributions
   (b) Creating merge requests on GitLab, and reviewing and evaluating each contributor's changes
(4) Distribute the workload evenly and fairly by:
   (a) Creating concrete tasks based on the requirements document
   (b) Using GitLab tools like Issues to assign and manage them
   (c) Communicating (see **Communication** section) to collaboratively decide on task assignment
(5) Collaborate in a formal capacity by:
   (a) Assigning a rotation of team members to chair and take minutes during official meetings
   (b) Providing and receiving feedback, and acting on it

3 TARGET AMBITION LEVEL

After revision and according to group consensus, we believe an 8/10 is achievable. The team is not only concerned about the completion of the project, but also places emphasis on thorough planning, comprehensive code contributions, and thoughtful code reviews to ensure the integrity and quality of our work.

Each team member strives for continuous improvement based on the feedback that he receives during a team meeting or from the teaching assistant that is responsible for the team. In the event it becomes increasingly obvious that this level of effort is too ambitious and unachievable in the time left, either due to a heavy workload or a team member feels the need for a change of the ambition level for any reason, it must be discussed and voted on during a team meeting.

4 PLANNING

External planning:

(1) Meetings and work sessions
   (a) Official meetings on Tuesdays are expected to last up to 45 minutes:
      (i) Circularly, a chair and minute taker will be assigned;

(ii) Important matters like the status of the project and division of tasks take place during the meeting;
(iii) Issues related to the project will be brought up to the TA;
(b) Lab hours before and after the official meeting will be used for discussion;
(2) Organization
(a) Most of our activity will be tracked on GitLab:
(i) All tasks will be attributed through the issues tab in GitLab, where each member assigns themselves tasks;
(ii) All agendas for the official meetings and minutes will be recorded on GitLab;
(iii) If available, minutes for the unofficial meetings will be uploaded to the GitLab repository;
(iv) Feedback will be provided through comments under merge requests;
(v) General questions about the project and other suggestions may also be resolved through GitLab, in favor of internal communication channels;
(b) Other less important but still relevant chats and discussions may take place on Mattermost;

Internal planning:

(1) Meetings and work sessions outside of the mandatory sessions
(a) A weekly meeting is expected for maintaining a clear overview of the current status. During these meetings we will discuss future planning, assign tasks and share updates:
(i) A universally available online platform/location will be selected;
(ii) All members are expected to attend;
(iii) A shortlist and potential minute of each meeting will be uploaded to Gitlab;
(b) Private meetings either online or in person can be organized between members if agreed;
(c) According to the division of tasks, the rest of the work which is classified as individual is up to the assigned person to work on whenever they see fit. The individual progress will be tracked in accordance to the internal planning;
(2) Task and time management
(a) Based on the desired outcome of the project, an appropriate general expectation will be met by each member. This can be verified through the means of communication or during meetings;
(b) Having taken into consideration the common goal, the tasks and planning will be conceived accordingly;
(c) Ensure each member finishes their assigned tasks on time through regular check-ins:
(i) On the WhatsApp group;
(ii) In person during the lab hours;
(iii) During our private meetings;
(iv) During the official meetings;
(v) In private on Gitlab, following the commits, merge requests, issue tab and general activity;
(vi) On Mattermost;
(d) The tasks will be divided equally such that no discrepancies are observed;
(e) It is expected that all issues assigned for a current week are finished before Sunday at 23:59 CET;
(f) The exact division of tasks will not be strict; If spontaneous tasks appear, they will be documented on GitLab through the merge requests;
(g) Task division will be discussed during meetings or on platforms accessible to all to ensure each person gets assigned the correct task;

5 BEHAVIOR

5.1 General Behavior

To facilitate our teamwork, we want to foster a friendly and productive environment where anyone is allowed to make mistakes. To achieve this we want to be forgiving to each other. When someone is annoyed by someone's behavior, then it is important to apply the AID model. This allows us to respectfully communicate with each other when there are tensions.

5.2 Disagreements

Here we lay out a plan for handling disagreements that will inevitably happen during the span of the project: These disagreements can be about trivial design/coding decisions, ambiguity related questions, or the effect of personal problems. In essence, any kind of disagreement.

(1) Everyone that is involved in the conflict/disagreement ought to seriously listen to each other. This means giving other people the time they need, to bring forth their opinion. To take the time yourself to think deeply about the brought up opinions. It is key to be aware of the fact that everyone has their own valid perspective on topics. When everyone is heard, it is important to try to come together to find a solution.
(2) In the case that involved participants aren't able to find common ground, then the next link in the chain will become the entire group. Here, essentially the same recipe as has been stated before will be repeated; listen to everyone, understand the different perspectives, and find a solution. It is vital that everyone accepts at this stage that compromises might have to be made, because the next stages of escalation are only meant for the problems of utmost importance.
(3) Sometimes, problems cannot be resolved with the aforementioned procedures. In such a scenario it is best to have a proper discussion with our project TA. During this discussion, the following points should be introduced to the TA: all the aspects of the problem, every side maintained by any party involved, and the measures that the group has gone through to get to this point. Advice of the TA should be taken very seriously, because the proper handling of these problems should have been our responsibility.
(4) When all other measures are exhausted, contact with the head TA will become necessary. Here the same procedure

for contact with our project TA will be applied. Be aware that this is only meant as a last resort.

5.3 Meeting Punctuality

The actual start of meetings will depend on the punctuality of its members. For the weekly TA meeting:

- If some member is late, and has been late for at least 2 times before, then the start of the meeting won't take the presence of this person into account.
- Else if someone communicates before the slotted time that he will be 5 to 10 minutes late, then wait for a maximum of 5 minutes to start the meeting.
- Else start the meeting at the beginning of our time slot. During additional meetings we will wait 15 minutes, if someone communicates before the agreed upon start time of the meeting that he will be late for no more than 15 minutes.

6 COMMUNICATION

When it comes to communication, outside of the already existing platforms that were set up beforehand for having good engagement (Mattermost and Gitlab), we have made sure we had other channels through which we could reach out to the team members.

First, we created a WhatsApp group that allows us to easily send messages and speak out our concerns and on top of that request feedback for our merge requests and new commits that we have implemented. Secondly, we have built up a Discord server that would allow us to have meetings remotely and conversations in the voice channels. Also, we can put the most important resources, documents and ongoing issues in the "important-links" and "tasks" text channels. In addition, it is a great platform in which we can enter at any time from anywhere with a teammate when we are facing an issue, so it makes collaborating much more feasible.

After the creation of these channels, we agreed upon a mandatory meeting every Monday at 7 p.m. on our Discord server in which we would check on both our individual and team progress. This way, we can always stay up to date with each other, discuss the issues we are currently facing with the development of our application and assign tasks more clearly than we have already done in the official meeting.

One more important aspect of communication is not only staying in touch with our teammates but our assigned TA as well and we are doing that through Mattermost, where we ask questions about tasks that we feel are unclear or make sure we are having a correct approach when it comes to the project. Moreover, we try to be as punctual as possible when it comes to sharing the week's agenda and minutes on GitLab and additionally have a team member write a report that will be shared on Mattermost for a better collaboration with our TA.

7 COMMITMENT

Commitment is gauged by code and teamwork contributions, with the quality of group work and the commitment of the chair/minute taker evaluated during Tuesday TA meetings, within code reviews, and through ongoing **Communication** (see relevant section) channels.

The quality of work of the team as a whole is determined by:

(1) Code Quality
   (a) The GitLab build pipeline on the main branch passing
   (b) Fulfillment of user stories and requirements
   (c) Elimination of bugs and unintended behavior
   (d) High-coverage (ideally 80%) automated unit & integration testing being present
   (e) JavaDoc documentation written for all relevant methods
   (f) The ability of each team member to read, understand, and explain a given code fragment
   (g) Proper principles from the **Assignment Description** section (e.g. dependency injection) being applied throughout the codebase
   (h) Uniform code style
(2) Coordination
   (a) A usable deliverable being available for demonstration at the end of each sprint
   (b) Submissions being made in a timely manner
   (c) Code reviews being submitted at most 2 days after a Merge Request is created
   (d) Use of GitLab issues to divide and plan tasks
   (e) The sprint schedule being expedient enough to complete the **Target Ambition Level** (see section) in the allotted time frame

The quality of a specific team member's work is determined by:

(1) Code Quality
   (a) The GitLab build pipeline on a member's feature branch passing, if the branch's Merge Request is finalized and awaiting approval
   (b) Fulfillment of assigned requirements
   (c) Elimination of bugs and unintended behavior in code before merging, and if more are discovered later, within under a week of discovery
   (d) High-coverage (ideally 80%) automated unit/integration testing on each feature branch
   (e) JavaDoc documentation written for all relevant methods on
   (f) Proper principles from the **Assignment Description** section (e.g. dependency injection) being applied
   (g) Little to no CheckStyle warnings, using the agreed-upon set of CheckStyle rules
   (h) Little to no compiler warnings
   (i) Code style similar to team's as a whole
   (j) Code fitting in with others' contributions in terms of architecture and strategy
   (k) Knockout Criteria being fulfilled
(2) Coordination
   (a) Submissions being made in a timely manner, to allow others to review them
   (b) Providing helpful and constructive comments on merge Requests
   (c) Creation and assigning of GitLab issues to themselves

The commitment of the chair is determined by:

(1) Submission and merging of the week's agenda before Sunday 23:59 PM.
(2) The agenda tackling all important talking points for the week.

The commitment of the minute taker is determined by:

(1) Minutes containing all relevant meeting decisions
(2) The previous week's minutes being submitted prior to the current week's meeting

8 DECISION MAKING

In the team context, especially for our project, decision-making is essential for progress and achieving our goals. Given our collective inexperience, we often face scenarios where the correct approach is unclear, with each member potentially advocating for different solutions. This diversity in problem-solving approaches necessitates a structured decision-making process to navigate through project milestones, deadlines, and any arising conflicts or delays.

To address this, we've established a voting system categorized into three types of decisions: routine, decisions of change, and significant decisions. Routine decisions cover everyday project management tasks, such as assigning roles for meetings or document management, and require a simple majority (at least 4 members in agreement) for resolution.

Decisions for change are invoked during disagreements or conflicts, necessitating not only a majority vote but also compelling arguments from team members to support their viewpoints. This category includes resolving code conflicts, making changes to the project's design, or reassigning tasks among members.

Significant decisions, which could drastically alter the project's direction or structure (e.g., removing features, overhauling the project layout, or restarting the project), demand unanimous consent and strong justification from all team members due to their profound impact.

Finally, recognizing our limitations and the complexity of certain decisions, we value the input of our Teacher Assistant (TA). Consulting the TA for advice ensures informed decisions in critical scenarios, leveraging their experience to guide our project towards successful completion. This decision-making framework is designed to balance efficiency with thorough deliberation, ensuring that all team members contribute to steering the project in the right direction.

9 DEALING WITH CONFLICTS

In the context of a team, views and opinions between team members may differ. Sometimes, those views can differ so much that conflicts may arise. One of the most important aspects of teamwork is knowing how to deal with said conflicts.

We found two types of conflict that can occur: conflicts involving parts of the project and personal conflicts. The first type of conflict can appear when two or more people have a problem with a certain aspect of the project, such as: the look of the overall application, the ways to implement certain functionalities etc. In that case, we must decide on the correct way to proceed. This kind of conflict is solved by casting a majority vote with arguments (it is part of the category decisions of change). First, the two people involved in the project present their points of view and then, the other team-members cast their votes.

In the case of the second type of conflict, things can get more complicated. Personal conflicts can appear because of different views of people on aspects outside the project environment, such as: political views, racial issues etc. Although these problems should not be a concern for the team, it is important to solve them to maintain a healthy working environment. Since these matters are sensitive, we cannot just vote for the correct way to handle the issue. Personal matters should be solved by the two parties on their own.

In case conflicts escalate, for example someone does not agree with the vote of the other teammates, we need to find a way to solve the problem. Since we could not convince the other person, the best course of action is to address the problem to the Teacher assistant and hope that he can offer insight on the matter, such that everyone in the team can understand the mistake and continue collaborating.

10 CONSEQUENCES

General predispositions:

(1) The goal is focusing on prevention and not having to resort to consequences to solve conflicts;
(2) These consequences are only meant to continuously improve our collaboration and the workflow of the project;
(3) None of the consequences should have an impact on the person's wellbeing;

Consequences related to meetings and work sessions:

(1) Consequences related to the private meetings:
    (a) It is acceptable that members notify no later than 30 minutes before the meeting if unforeseen circumstances occur;
    (b) If a person misses meetings/is constantly late but a notice has been received we will hold a discussion to figure a possible solution;
(2) Consequences related to the official meetings:
    (a) If a person is constantly (more than twice) late (more than 5-10 minutes) the team will reach the member to see why this might be and suggest arriving earlier for the lab session;

Consequences related to tasks:

(1) If a person does not finish all assigned tasks which had significant relevance to the development of the project, they will:
    (a) Receive a heads up if it happens once;
    (b) Have to reasonably motivate why they were not able to do the task/tasks if it happens twice;
    (c) Have to assist in a serious discussion as to why they were unable to do so if it happens more than three times; the discussion is aimed at finding solutions for the inactivity;

Consequences related to behavior:

(1) Discriminant behavior is not tolerated in any form;

(2) If a person makes inappropriate remarks regarding any other member they will be notified and asked not to repeat such behavior:
   (a) If the behavior is repeated to an extent where it is out of the control of the team, the TA will be notified;
   (b) If the person clearly has bad intentions or continues to disturb the activity of the project; a formally written message will be sent to the board of the course;
(3) If a person physically harms any other team member, a formally written message will be sent to the board of the course;

Other consequences:

(1) If the assigned chairs/minute takers can not for any reason fulfill their duty during the meeting they may notify the team in a timely manner and take up the position in a future meeting if possible;
(2) Other potential actions which may require consequences and were not specifically mentioned above will follow the consequences in ranging magnitude: notification from the team members -> discussion with the team members -> discussion with the TA -> letter to the board of the course;

11 OUTSIDE COLLABORATION

It is expected that each week, at 14:45 the team members will meet at flux hall to discuss final thoughts before the scheduled TA meeting every Tuesday, unless the team members have collectively decided to not hold the meeting. The purpose of these meetings is to ensure that all the members are up to date and voice any issues or ideas that they have about the project.

For information on the Discord meeting on Mondays at 7 p.m., see the **Communication** subsection.

Additionally, a weekly vote will be conducted to decide if an additional group meeting is to be held in Discord. In the case that one is to be held, the date and time will be agreed on and posted on WhatsApp/Discord. The vote can be conducted either in person during another meeting, or digitally in WhatsApp or Discord. During these meetings we resolve left-over problems of the week.