

## 2212 Team contract

### 1. Overview of project

Project factors	<ul style="list-style-type: none"><li>• Team #: 54.</li><li>• Team members: Dilraj Deogan   Rayan Amir   Aryan Baria   Mohammed Bayoumi   Maher Fawzi Rammal.</li><li>• Project: Designing a virtual pet game, where the user will take care, personalize, and interact with a pet picked by the user.</li><li>• Guidelines: This contract outlines the expectations, roles, and responsibilities of each team member for the CS2212B Group Project. This agreement ensures that all members contribute equally, meet deadlines, and maintain professionalism.</li></ul>
Meetings	<ul style="list-style-type: none"><li>• Where: virtually using Discord video call.</li><li>• When: Tuesdays from 7:00 to 7:30 and on Wednesdays after the TA meeting from 7:30 to 8:00 (Totaling 1 hour a week).</li><li>• Who: Mohammed will be taking note of meeting times and what was discussed.</li><li>• How: Meetings will be scheduled on the weekend, or Monday (through iMessage group chat) confirming if everyone is set to meet on both Tuesday and Wednesday (All decisions will be recorded in the GitLab Wiki).</li></ul>
Work Norms	<ul style="list-style-type: none"><li>• Hours worked: Each member is expected to work at least 2 hours (assigned task or working on a group task).</li><li>• Deadlines: Set at the start of each week on Monday.</li><li>• If a team member cannot meet a deadline, they must inform the team at least 48 hours in advance.</li></ul>

	<ul style="list-style-type: none"> <li>• Consistent failure to meet deadlines will be reported to the TA and professor.</li> </ul>
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## 2. Team Roles and Responsibilities

Each team member will contribute to multiple areas, ensuring a distributed workload and collaboration. Each task will have at least two assigned members to encourage teamwork and accountability.

Project Management & Documentation <b>(Assigned to:</b> Mohammed, Maher)	<ul style="list-style-type: none"> <li>• Oversee project progress and ensure deadlines are met.</li> <li>• Manage the GitLab repository and ensure proper version control.</li> <li>• Maintain the GitLab Wiki with required documentation, UML diagrams, and team meeting minutes.</li> <li>• Coordinate with the TA, professor, and team members for requirement clarifications.</li> <li>• Ensure compliance with non-functional requirements, including coding standards, documentation, and testing practices.</li> </ul>
Backend Development (Game Logic & Mechanics) <b>(Assigned to:</b> Maher, Mohammed, Aryan Baria)	<ul style="list-style-type: none"> <li>• Implement gameplay mechanics and logic (pet stats, state management, player interactions).</li> <li>• Develop the saving/loading system following requirement 3.1.5.</li> <li>• Implement commands such as feeding, playing, sleeping, and inventory management.</li> <li>• Ensure game state transitions (e.g., pet happiness decreasing, health effects) follow requirement 3.1.6.</li> </ul>
Frontend Development (UI/UX & GUI)	<ul style="list-style-type: none"> <li>• Develop the Graphical User Interface (GUI) following requirement 3.1.1.</li> <li>• Implement Main Menu, Game Screen, Tutorial Screen, Load/New Game, and Parental Controls</li> </ul>

<p><b>(Assigned to:</b> Maher, Dilraj, Rayan)</p>	<p>(requirements 3.1.2 - 3.1.11).</p> <ul style="list-style-type: none"> <li>• Ensure the interface is accessible, intuitive, and visually appealing (requirement 3.2.4, 3.2.18).</li> <li>• Implement animations and pet sprites following requirement 3.1.10.</li> </ul>
<p>Database &amp; File Handling <b>(Assigned to:</b> Maher, Dilraj)</p>	<ul style="list-style-type: none"> <li>• Implement data storage for saving/loading game progress (requirement 3.1.5).</li> <li>• Choose an appropriate format (e.g., JSON, XML) and ensure efficient reading and writing operations.</li> <li>• Ensure pet stats, inventory, and player progress persist across sessions.</li> <li>• Implement file-handling error checks to prevent data corruption or loss.</li> </ul>
<p>Parental Controls &amp; Extra Features <b>(Assigned to:</b> Mohammed, Aryan Baria, Rayan, Maher))</p>	<ul style="list-style-type: none"> <li>• Implement parental controls, including playtime restrictions and statistics tracking (requirement 3.1.11).</li> <li>• Develop the revived pet functionality for parental access (requirement 3.1.11.3).</li> <li>• Work on the required extra functional features (requirement 3.1.13), such as mini-games, additional pet states, or enhanced animations.</li> </ul>
<p>Quality Assurance &amp; Testing <b>(Assigned to:</b> Rayan, Aryan Baria, Dilraj)</p>	<ul style="list-style-type: none"> <li>• Implement JUnit 5 unit tests for all major game functions (requirement 3.2.11).</li> <li>• Perform extensive manual testing to ensure compliance with functional requirements (3.1.1 - 3.1.13).</li> <li>• Ensure error handling and user feedback are properly implemented (requirement 3.1.12).</li> <li>• Monitor and enforce coding standards, readability, and documentation.</li> </ul>

#### 4. Conflict Resolution

How each member should resolve any conflicts	<ul style="list-style-type: none"><li>• If conflicts arise, team members will first attempt to resolve them internally (meetings, GitLab).</li><li>• If unresolved, the issue will be brought to the TA for mediation.</li><li>• If necessary, the issue will be escalated to the course instructor.</li></ul>
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#### 5. Peer Review & Evaluation

How each member should evaluate work	<ul style="list-style-type: none"><li>• Team members will evaluate each other at the end of the project based on contributions, cooperation, and adherence to this contract.</li><li>• As per the course requirement, a minimum 40% peer review score is required to pass.</li><li>• If a member does not contribute or violates the contract, their grade may be penalized as per course policies.</li></ul>
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## 6. Signatures

By signing this document, we acknowledge that we have read, understood, and agreed to the terms of this contract.

Team Member Name	Signatures	Date Signed
Dilraj Deogan	DD	January 29, 2025
Aryan Baria	AB	January 29, 2025
Rayan Amir	RA	January 29, 2025
Mohammed Bayoumi	MB	January 29, 2025
Maher Rammal	MR	January 29, 2025