1. Group name and number
   GA_01

2. Theme and interpretation
   Strange pet, "collaborating on adventures with my strange pet."

3. Game idea in about 100 words:

It's a platformer game where you have to collaborate with a strange pet. Solving puzzles and fighting enemies so you can reach home safely with your newly found pet. The levels vary between puzzle and combat levels. You can switch between controlling the player and the pet during the puzzle levels, this is only possible while maintaining line of sight(otherwise control of pet is lost). And during combat levels, the pet will be controlled by AI while the character is controlled by the player. After all the levels are completed, the final boss battle will determine whether the pet will stay with you.

4. Student names, emails and role assignment

Name	Student Number	Email	Role
Alvin de Blieck	4557573	A.s.deBlieck@student.tudelft.nl	Game Designer Gameplay Testing
Qianqian Chen	4593499	Q.Chen-5@student.tudelft.nl	World Builder
Casper Teirlinck	4680723	C.Teirlinck@student.tudelft.nl	Lead Programmer
Shunqi Tang	4673530	S.Tang-2@student.tudelft.nl	Lead Artist
Shifra Lopulalan	4564383	S.A.Lopulalan@student.tudelft.nl	Game Designer Producer

5. Which features you are thinking to be implementing in your game
Computer Graphics (CG): 16 ¾ ★
   o 3D Models:
      ▪ 3D models ★★
      ▪ 3D animated models ★★★
      Maybe: ▪ Optimizing 3D models for games (e.g. high to low-poly conversion)
   ★

o Textures:

- Animated Textures (e.g. fire, water, magic, TV screens) ★
Maybe: ▪ Custom animated textures ★★
Maybe: ▪ Baking normal maps from highpoly to lowpoly 3D models ★

o Special effects & Juiciness
- Animations with eases: [In/Out][Cubic/Quad/Circular/Bounced] ★
- Audio mixer effects (e.g. in the pause menu, music sounds muffled) ★
- Camera shakes (e.g. with explosions, button clicks, hits) ★
- Particle Systems (e.g. explosions, dust particles, fire, smoke, magic) ★

- Camera smoothing ★
o Rendering
- Play with lights and shadows ★

o User Interface (with new Unity3D UI tools)
- Main menu screen ½ ★
- End/results/score screen ½ ★
- Pause ½★
- High scores ★
- Options ★
- Credits ¼ ★
- UI animations ★

● Artificial Intelligence (AI) 6 ★
o Dumb enemy ★
o Smart enemy ★★
o Pathfinding using own algorithm ★★★

● (Web-Based) Game Analytics (GA) 7 ★
o Create your own remote server for storing data ★★ ??
o Save relevant information from your game during play ★★
o Collect and show highscores (remotely) ★
o Create gamer accounts (with avatars) ★
o Save and share game states with others through social media ★

● Programming (PR) 9 ★
o Game Mechanics

- Dynamic difficulty based on player skill ★
- Moving platforms ★
- Maybe: ▪ Race against the clock ★
- Local multiplayer ★

o Game loop
- ▪ FPS independent (use Time.deltaTime / Time.fixedDeltaTime) ★
- ▪ Player can go back in time (like an "undo") ★ (Load previous save)

o Physics
- ▪ Use Unity's triggers to trigger certain actions ★
- ▪ Use Unity's full physics simulation for all movement, collisions etc ★★