

**Possible** additional features of the chicken survive game (depending on how much time we can do this)

1. A speed boost that allows the hen to move faster for a limited time
2. Make different levels to be more challenging. E.g. The fox shows more often; the fox can also have a speed boost; change different background to make it more playful...
3. Set obstacles to slow down the movement of the fox or the hen.
4. Track for the scores, to see how much the highest score is.

### Details of the game design

1. Create images for the hen, worm, fox, and baby chicks in .png format.
2. Set up the basic structure of the game using HTML, CSS, and JavaScript.
3. Write the logic for the game. Use JavaScript classes or object literals to define hen, worm, fox, and baby chicks.
4. Define the movement and interaction of the objects.
  - 1) The total number of the worms is always 5, the hen eats 1 worm, it will automatically and randomly pop out 1 worm from the ground.
  - 2) The hen moves when the arrow keys are pressed.
  - 3) The hen eats worm when the mouse is clicked.
  - 4) The hen lay one egg when eat 5 worms.
  - 5) Fox moves randomly in the play screen.
  - 6) The number of baby chicks increasing by time (maybe every minute).
  - 7) The game ends when hen or any of babies is touched by the fox.
5. Make the basic game mechanics: movement of the hen, pop up the worms, the movement of the fox.
6. Add baby chicks to follow the hen and increase the numbers by time.
7. Add possible additional features to the game if time allows.
8. Add sound effects.
9. Debug and testing.

Timeline	
Week 12	Watch videos and self-teaching of similar game
Week 13	Start creating images of the hen, worm, fox, and baby chicks
Week 14	Create objects
Week 15	Make the hen, fox moving
Week 16	Make the make the worms pop up randomly
Week 17	Make the baby chicks follow mommy and increase numbers
Week 18	Make the chicken family die if they touch fox
Week 19	Add additional features if everything is done on time
Week 20	Make a trailer
Week 21 (26 May)	Hand in