Please provide the following information to be shared with on capstone information exchange platform:

1. **Project number:**
   S17-43

2. **Project title (as will appear on the poster):**
   Smart Pet Food Box

3. **Team members:** Xiaoyi Tang, Feng Rong, Zhe Chang, Jingxuan Chen, Rong Zhang

4. **Adviser(s) name(s):**
   Prof. Hana Godrich

5. **Up to 10 keywords that will help to classify the project:**
   automatic control; Arduino; Bluetooth; Android application;

6. **Project abstract (up to 200 words) to be shared with judges:**
   The reason why we want to make a smart pet food box is that more and more people choose pet as their companions but they can not feed their dog during their work. Our project is to make a smart pet food box which can be controlled by Android phone. We use Arduino as a microcontroller to do the circuit design, then use motor and sensors to control the food supply. We also build an application to choose food or water volumes and other functions. The microcontroller (Arduino) can open the gate once it reaches the setting time. The microcontroller (Arduino) can close the gate when the food reaches the setting food volume. We also use 3d printing to complete a part of our box. Even though our food box is simple and crude the greatest advantage, comparing the existed pet bowl, is that the user can set the food volume and time. Another advantage, comparing the existed smart pet bowl, is that the price is not expensive. Last but not least, the food box is eco-friendly since the box is made of scrap carton. In the future, we will add more functions to the box.