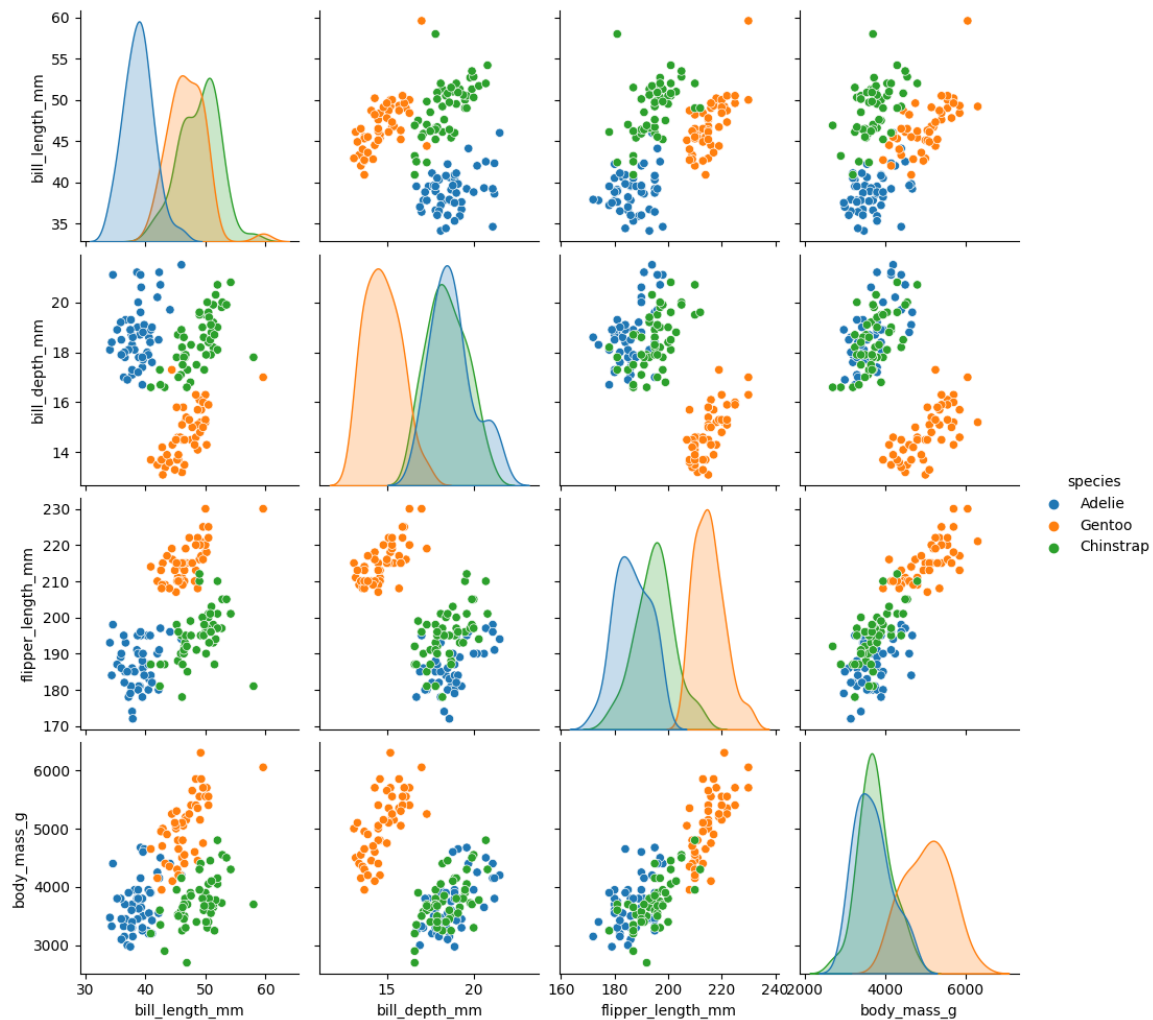# Task 1 - Perceptron Report

Team: SC_H7

● Which features discriminate and which don't?

From the previous pair plot, we can see that the plots that are linearly separable are:

- For Chinstrap & Gentoo:
    - Bill depth vs. body mass
    - Bill depth vs. flipper length
- For Chinstrap & Adelie:
    - Bill depth vs. Bill length
- For Adelie & Gentoo:
    - Bill depth vs. body mass
    - Flipper length vs. Body mass
    - Flipper length vs. Bill depth
    - Flipper Length vs. Bill length
    - Bill depth vs. Bill length

Best accuracy was obtained with Adelie & Gentoo Classes Using bill depth and flipper length features. We used a learning rate of 0.01, 2 epochs and no bias.