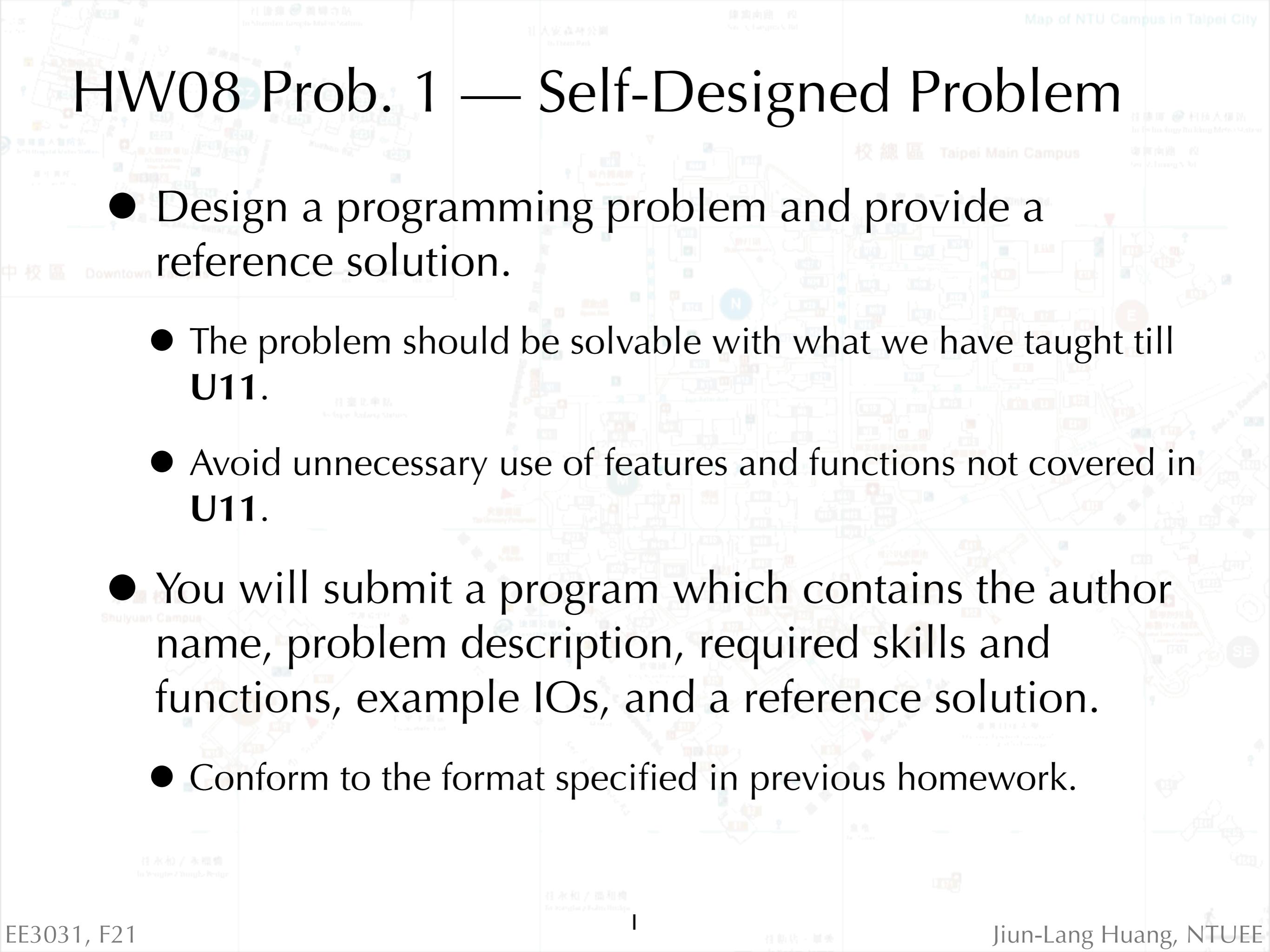# HW08 Prob. 1 — Self-Designed Problem

- Design a programming problem and provide a reference solution.

  - The problem should be solvable with what we have taught till **U11**.

  - Avoid unnecessary use of features and functions not covered in **U11**.

- You will submit a program which contains the author name, problem description, required skills and functions, example IOs, and a reference solution.

  - Conform to the format specified in previous homework.

1

# HW08 Prob. 2 — Majority Gender

- Consider the baby names database (from 1880 to 2020). Write the program majority_gender.py that determines whether there are more baby boys or girls in each year.

  - It is assumed that the names folder (obtained after unzipping names.zip) is placed in the same folder as majority_gender.py.

  - Do not include the names folder in your submission.
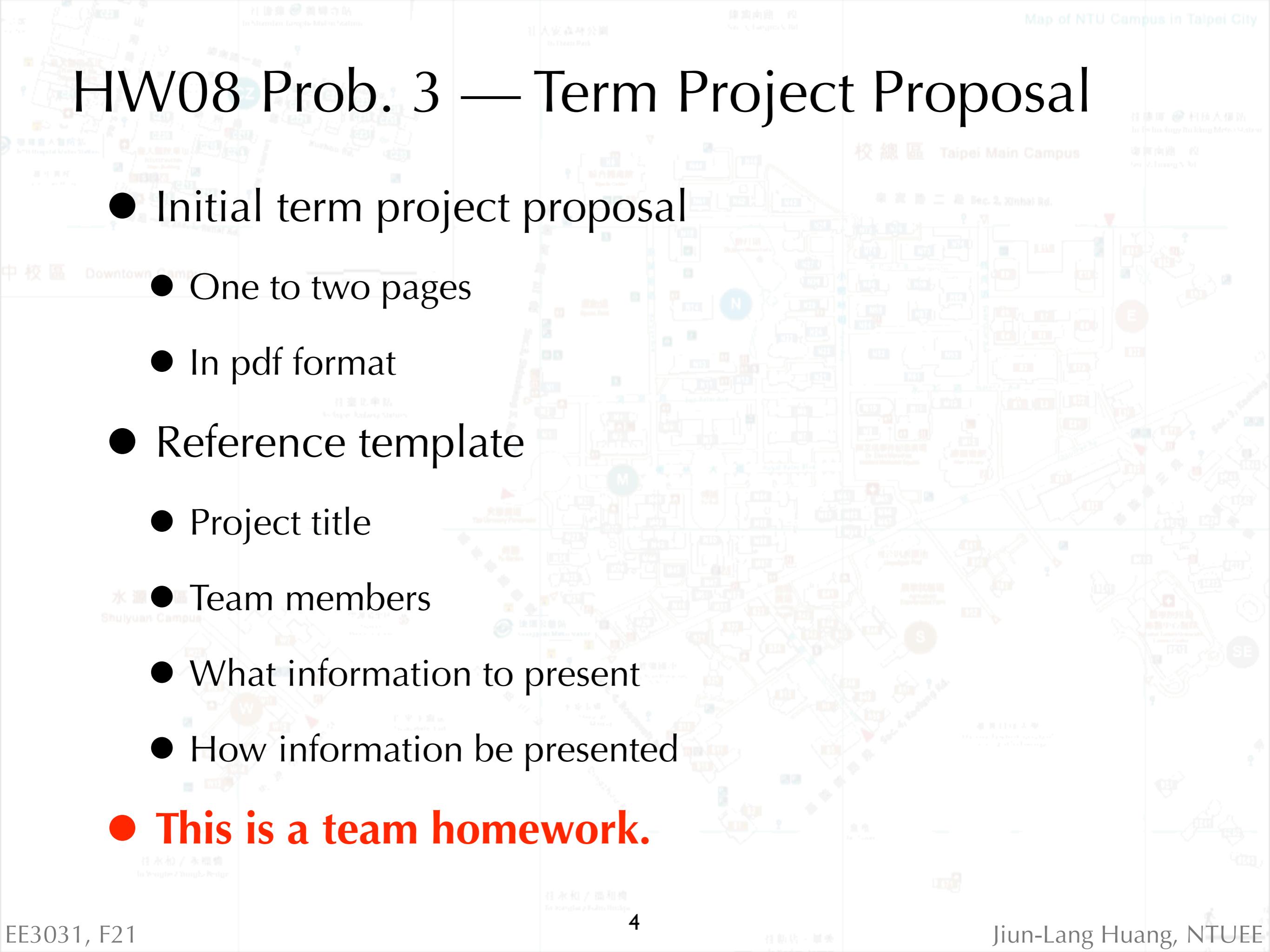
- **This is a team homework.**

```
fin2017 > python3 majority_gender.py
year 1880: more boys — 110490 > 90994      # 110490 and 90994 are numbers of baby
year 1881: more boys — 100738 > 91953      boys and girls in 1880, respectively.
year 1882: more boys — 113686 > 107847
year 1883: more girls — 112319 > 104625
...
...    # omitted for simplicity.
year 2018: more boys — 1810309 > 1695654
year 2019: more boys — 1785527 > 1670419
year 2020: more boys — 1706423 > 1598836
fin2017 >
```

# HW08 Prob. 3 — Term Project Proposal

- Initial term project proposal

  - One to two pages

  - In pdf format

- Reference template

  - Project title

  - Team members

  - What information to present

  - How information be presented

- **This is a team homework.**

# Submission Guidelines

- Due: December 8, 2021 via NTU Cool

- Name your program as instructed in the problems.

- Pay attention to your programming style.

- **Avoid using Python features and functions not covered in lectures yet.**