

# Mid-term Instructions

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## 1 Problems

There are 3 problems for teams to choose from:

1. Sino-nom character localization: Dataset.
2. Sino-nom character recognition: Dataset.
3. Sino-nom character retrieval: Dataset

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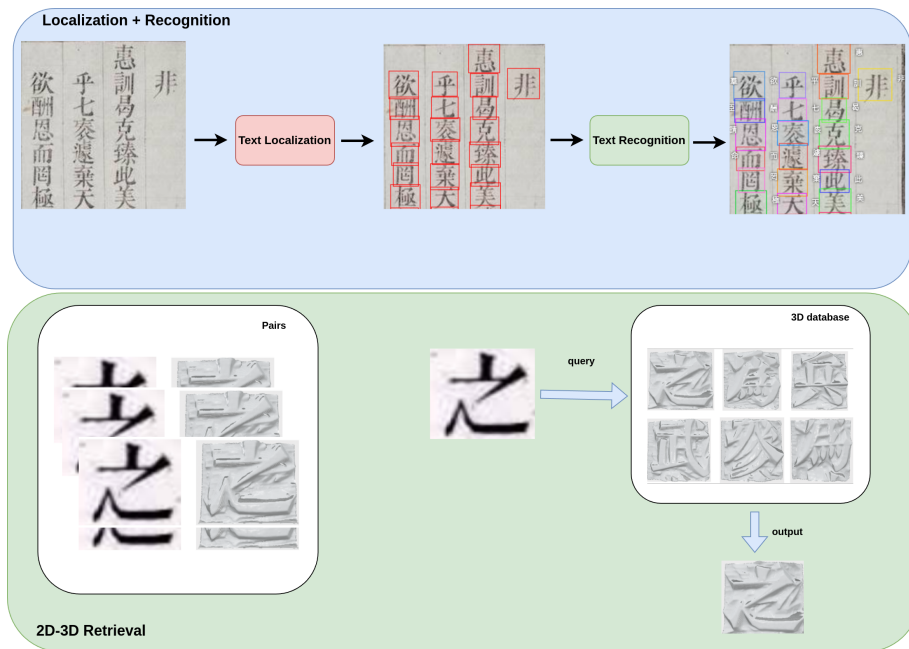


Figure 1. Problems illustration

## 2 Project Stages

1. Phase 1: Make a team with 3-4 members and choose a team leader (Duration: 0.5 week)
2. Phase 2: Planning and Proposal Development (Duration: 2 week)
  - (a) Conduct a thorough literature review and survey of existing solutions or methods relevant to the chosen problem.
  - (b) Assign tasks to team members
    - i. Divide the project into manageable tasks or milestones.

- ii. Assign tasks to team members based on their strengths, **ensuring balanced and efficient task distribution.**
- (c) Write proposal report and submit to the UET course.
- 3. Phase 3: Experimentation, Reporting, and Q&A Preparation (Duration: 3 weeks).  
After Phase 3, the Test dataset will be publicized and the project’s methods will be evaluated on a newly publicized test dataset, and then will have short Q&A conversation with the TA of the class.

### 3 Reports and QA

- 1. After Phase 2, each team needs to write a no-more-two-page report with the following contents:
  - (a) Topics your team choose
  - (b) Details of the directions, desired targets, and plan to achieve these desired targets.
  - (c) Information of each team member, and tasks assigned for each team member.
- 2. After Phase 3, each team needs to submit:
  - (a) Evaluation notebook
  - (b) Final report
  - (c) Mid-term Github repository

### 4 Supplements

#### 4.1 Metrics

- 1. Sino-nom character localization: mAP@[.5,.95]
- 2. Sino-nom character recognition: Accuracy
- 3. 2D-3D Sino-nom character retrieval: Mean Reciprocal Rank (MRR)@5

#### 4.2 Submission

Each team is required to prepare a Python script or notebook for evaluation purposes. This evaluation file will produce outputs depending on specific tasks, as detailed below:

**Sino-nom character localization.** The output format closely mirrors that of the .txt validation file, with a notable exception: each line in the prediction file will adhere to a specified format:

label\_id x\_center y\_center bbox\_width bbox\_height confident\_score

**Sino-nom character localization.** The submission format for the competition is a csv file with the following format:

image\_name,label

**Sino-nom character retrieval:** The submission format for the competition is a csv file with the following format:

query\_name\_file\_1,“output\_file\_1,output\_file\_2,output\_file\_3,output\_file\_4,output\_file\_5”

### 4.3 Grading

1. Have a complete pipeline: 55 points
2. Points based on private leaderboard ranking
  - (a) 1st Place: 20 points
  - (b) 2nd Place: 15 points
  - (c) 3rd Place: 10 points
  - (d) 4th Place: 5 points
3. Report, Github Repository, Q&A: 25 points