

## Programming Homework – MPEG Decoder

### Basic Requirement:

1. Implement an MPEG video decoder (I-frame, IP-frames, IPB-frames ) with UI (display) [1].
2. Correctly read the MPEG clips (with I, P, B frames) [2] and skip frames (e.g., B-frames) which your decoder doesn't support.
3. Submitted package must include: (1) source codes, (2) executables, and (3) usage documents.
4. Submit Deadline: 6/24, 23:59, send to [itct@cmlab.csie.ntu.edu.tw](mailto:itct@cmlab.csie.ntu.edu.tw).  
Demo: 6/25, 14:20-17:00 @R102

### Bonus:

- MPEG encoder.
- Real-time MPEG encoder.
- Any practical improvement.

### Note:

- Slow decoding time will get some penalties.
- The usage document should describe how to run your programs clearly.
- Virus-infected package will get stiff penalty.
- Do not include any obj or language-dependent files in the submitted package.  
The ones with unreasonable file-size will get some penalties.

### Reference:

[1] MPEG International Standard Part 2 - Visual (ISO 11172-2).

[2] The three MPEG clips: "I\_ONLY.M1V", "IP\_ONLY.M1V", and "IPB\_ALL.M1V".