SSY 150, lecture-4 (video compression) quiz questions #4, 2020-04-16

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1. What is the main approach that enables one to achieve a high compression rate on video?
   - ☐ remove small DCT coefficients
   - ☐ quantization of zigzag obtained 1D sequence
   - ☒ motion compensation
   - ☐ intra coding
   - ☐ others (specify)

2. In Inter mode video compression, we apply motion compensation on :
   - ☐ single frame
   - ☒ 2 frames
   - ☐ many frames
   - ☐ Others (specify)

3. Intra mode video compression considers the following:
   - ☒ single frame
   - ☐ 2 frames
   - ☐ many frames
   - ☐ Others (specify)

4. Which "mode" provides better video compression quality?
   - ☒ intra
   - ☐ inter
   - ☐ Others (specify)

5. Which "mode" provides highest video compression ratio?
   - ☐ intra
   - ☒ inter
   - ☐ Others (specify)

6. In video compression standards, one may select (a) SNR scalability, (b) spatial scalability, and (c) temporal scalability. Chose the box that associates to the specified scalability item in the line:

   + Change of quantization step size, linked to: ☒ (a) ☐ (b) ☐ (c) ☐ others

   + Change video frame rate, linked to: ☐ (a) ☐ (b) ☒ (c) ☐ others

   + Change image size, linked to: ☐ (a) ☒ (b) ☐ (c) ☐ others

7. The main differences between the 1st and 2nd generation video compression methods are:
   - ☒ DCT vs. wavelets
   - ☒ take into account human visual system property
   - ☒ Separately coding image edges and texture
   - ☐ apply octave bandwidth in subband filters
   - ☐ others (specify)

Thank for participating the quiz, hope it is fun to you !