

## **Instruction Manual for Video-Based MCQ Evaluation**

### Introduction:

This guide is designed to help you evaluate Multiple Choice Questions (MCQs) associated with a set of videos. Focus on assessing the relevance and accuracy of each MCQ based on the video content, and note the time spent on viewing each video for the evaluation. To answer most of the MCQ questions, we provide relevant time stamps in the video to make the annotation task very easy. The evaluation process is made straightforward with clearly defined pass/ fail conditions, ensuring a user-friendly experience.

### Objective:

To rigorously assess how well each MCQ aligns with the video content and to record the duration of the video watched during this assessment.

### Materials Provided:

- A dataset of videos (.mp4).
- MCQs for each video, comprising one question, one correct answer and four wrong answers. This is provided as excel sheets

### Evaluation Criteria:

#### **Condition 1 - Question Relevance:**

Determine if the video provides enough information to answer the MCQ. Please also confirm if the video is required to answer the question.

#### **Condition 2 - Correct Answer Validity**

Confirm that the marked correct answer is the most accurate and relevant based on the video.

#### **Condition 3 - Inaccuracy of Wrong Answers:**

Confirm that each wrong answer is less accurate/ complete compared to the correct answer. Please verify that all wrong answers are different from each other.

### Annotation Process:

#### **1. Detailed Video Review:**

- a. Watch each video attentively, focusing on elements crucial for the MCQs.
- b. Record the duration of video viewing.

## 2. Comprehensive MCQ Evaluation:

- a. Condition 1: Evaluate the question validity based on the following conditions:
  - i. **[Fail Condition] Video Irrelevant:** If the question cannot be answered using the video, mark **0** in *Label\_Q* column and note **<Can't be answered>** in *Remarks\_Q* column. Skip Conditions 2 and 3.
  - ii. **[Fail Condition] Video Unnecessary:** If the question can be answered without the video, mark **0** in *Label\_Q* and note **<Don't need video>** in *Remarks\_Q* column. Skip Conditions 2 and 3.
  - iii. **[Pass Condition] Video Relevant:** If the video is necessary for answering the question, mark **1** in *Label\_Q*, leave *Remarks\_Q* column blank, and proceed to Conditions 2 and 3.
- b. Condition 2: Evaluate the given correct answer.
  - i. **[Fail Condition]** If the given correct answer is incorrect, write **0** in the *Label\_A* column. In the *Remarks\_A* column, write the correct answer.
  - ii. **[Pass Condition]** Otherwise, if the given correct answer is indeed correct, write **1** in the *Remarks\_A* column. Leave *Remarks\_A* column blank.
- c. Condition 3: Evaluate the given wrong answers.
  - i. **[Fail Condition]** Evaluate each wrong answer. If any of them are correct, write **0** in the *Label\_W* column, and in the *Remarks\_W* column, write **<This is Correct: [correct options]>**
  - ii. **[Fail Condition]** If any of the answers are similar to each other, write **0** in the *Label\_W* column, and in the *Remarks\_W* column, write **<These are Similar: [similar options]>**
  - iii. **[Pass Condition]** Otherwise, if all wrong answers are indeed incorrect, write **1** in the *Remarks\_W* column. Leave *Remarks\_W* column blank.

## 3. Example Annotations:

- a. The following annotation examples are based on the cooking video with u\_id: b1b01372-64c3-4a6a-93fc-a86409f518ab

Refer to Example Annotations:

Before beginning your annotations, review the example annotations provided in the excel sheet. These examples will guide you on the expected level of detail and approach for your annotations.

Conclusion:

Your careful and thorough evaluations are crucial for keeping our dataset at a high standard. We value your dedication to accuracy and detail in this work.

We thank you for your sincere efforts.