Designing Interactive Systems I

Lab 5: A04, Visual Design

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General Remarks

- Please read up on the definitions/examples in the book and the lecture before contacting us with questions regarding our grading
- Never feel bad for asking us questions
- Be mindful in your review of example documents, devices, and software in the real world. This this is still the work of somebody else. Provide help with your knowledge instead of bashing their work
- Please provide high resolution images
- Be quiet when observing users during a study. Only help when asked



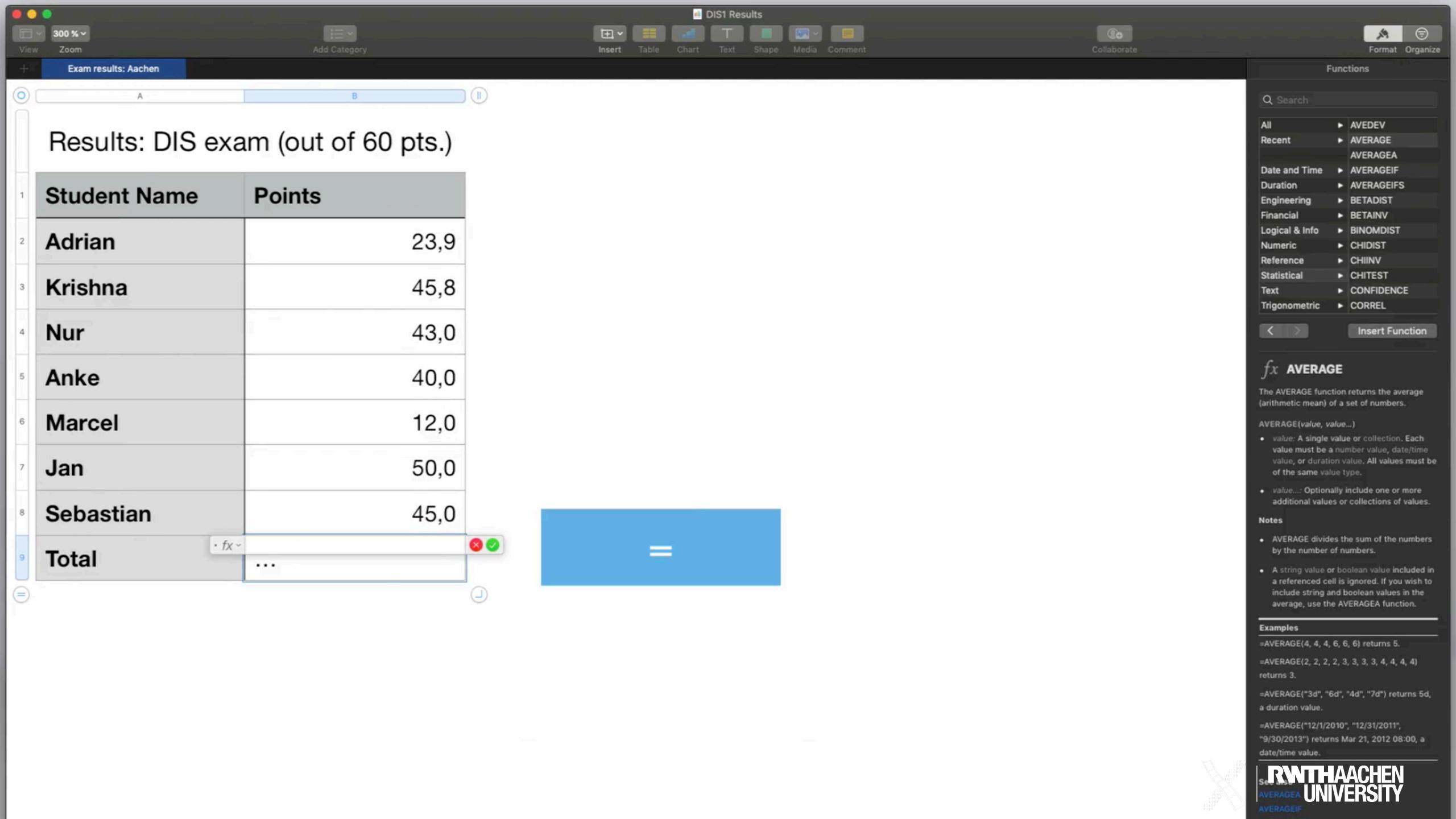
Assignment 04



Knowledge in the Head vs. In the World

The video "Computing Average in Spreadsheet.mp4" (attached with this assignment) shows a user using Numbers, a spreadsheet application, on macOS to find the average of a column. The blue box shows the user's keyboard input. For this task, identify **three instances each** for knowledge in the world and knowledge in the head. Redesign the interface to lessen the user's memory load by moving one or more entities of knowledge in the head to the world.

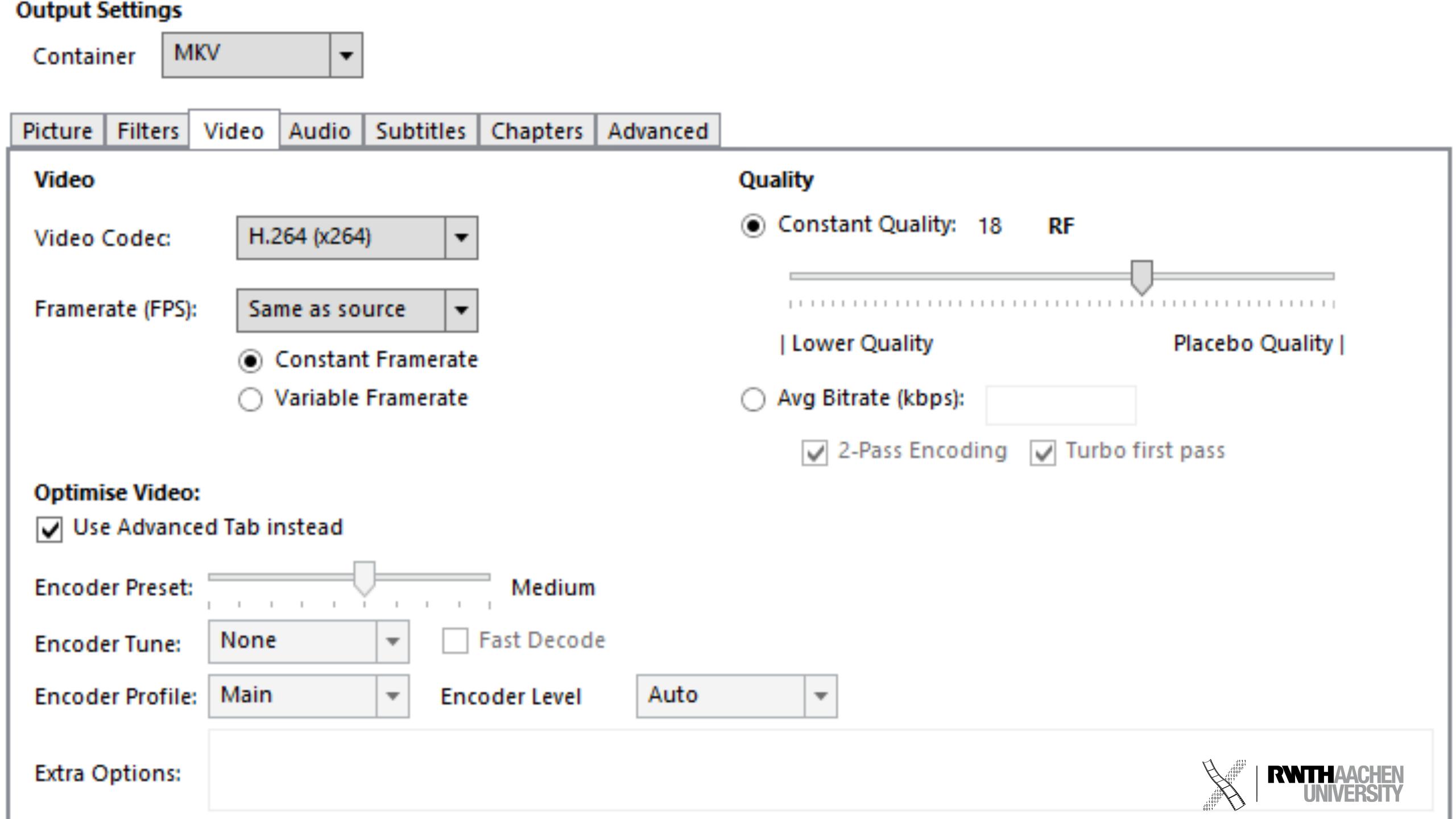




Errors - Mistakes & Slips

- In the lecture and the Norman book, you learnt about mistakes, which often occur as a result of conscious thinking. Perform the following:
 - a. Identify an app on a computing device (i.e., desktop or mobile) that you have had difficulty using in the past.
 - b. Find one or more users who have not used the app before. Like A02 and A03, make sure that these users (a) are representative of the target users for the app (i.e., assuming you are using Excel, users should be familiar with the basic functionalities like using functions or creating charts) and (b) are not members of your group.
 - c. Identify a task that you believe is difficult. Then, ask each user to perform this task until a user commits a mistake. Once you find that a user has committed a mistake, you do not have recruit any more users.
 - d. Record videos of users performing the task and then apply retrospective testing to identify what caused the mistake: Was there a problem in the execution (plan, specify) or in the evaluation (interpret, compare)? Retrospective testing is an evaluation technique where you let the user work with your system in an uninterrupted manner and then, after the session, you go with the user through the video/audio logs and talk about the what happened to understand the user's mental model.
 - e. Redesign the app interface to 1) minimize the chances of the mistake occurring in the future and 2) minimize the implications of the mistake. You can do this by designing for error, i.e., applying the appropriate design principle(s).

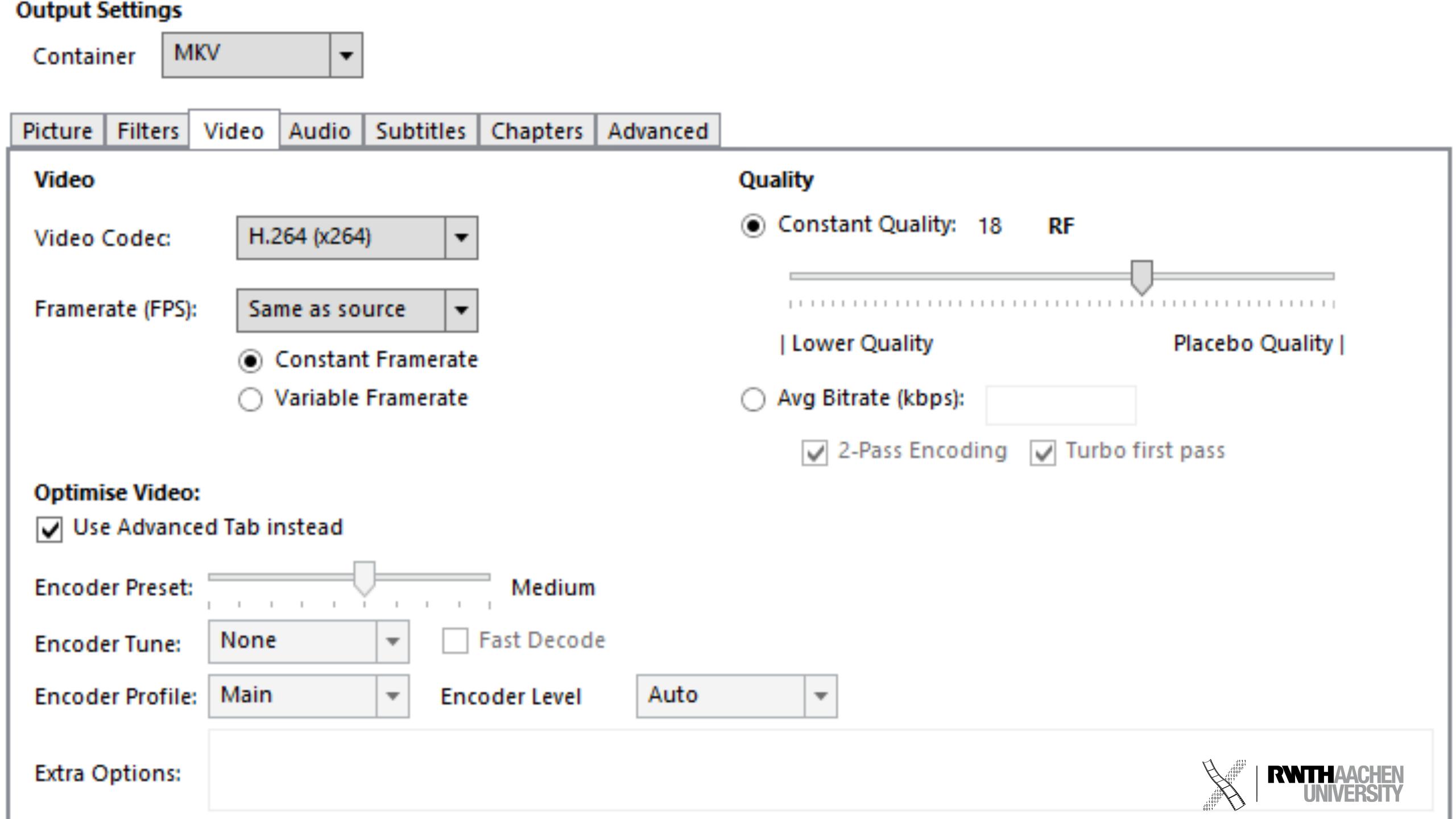




DE: Kleinere Verringerungen der Werte führen zu einer fortschreitenden Vergrößerung der resultierenden Dateigröße

EN: Smaller decrements of the values lead to a progressing incrementation of the resulting file size





Visual Design

