For preliminary/initial coding, I chose to use the grounded theory that combines InVivo coding and open coding as my coding strategy in this assignment because InVivo coding can preserve the original meaning of codes, which is critical for coders who are not very professional in cameras.

Preliminary coding document can be found here: <https://github.com/HengZ121/App.-of-NLP-ML-in-SE/blob/master/assignment%201/Preliminary%20Codes.docx>

By finishing preliminary coding, I found that, unlike literature, technical documents are usually tersely detailed, which means there are more key point stones that are needed to be coded while they are well portrayed without redundant words, so those documents require delicate skills in coding in order to compress an already precise sentence into a shorter one and to exclude the relatively trivial information, otherwise codes become very hard to be interpreted back in this case. In this assignment, I coded using both key-word and phrases in preliminary coding because the document introduces not only components of the camera which can be intuitionally coded by their name (based on the examples in background reading materials), but also the operation guidelines which requires more specific codes. Afterward, I found that the preliminary coding is inadequate to establish effective notations to construct state machines due to the lack of connection between codes.

Also, the content in technical documents is not always in time order nor sequential steps, thus it may require longer codes to declare prerequisites; for examples: in literature coding, we can always assume the previous code is a potential prerequisite (chased by dog, bite by dog), but in technical document, we may have to declare prerequisites in code to remain precise(*load file* and counter counts up, shutter makes sound when *counter stops*).