Android / Kotlin assessment

A machine-readable passport (MRP) is a machine-readable travel document (MRTD) with the data on the identity page encoded in optical character recognition format. (https://en.wikipedia.org/wiki/Machine-readable_passport).

Given an input string containing scanned MRZ lines, an Mrz class breaks this input data down into fields such as names, date of birth etc. Some fields in the MRZ contain a check digit, such as the document number, date of birth and expiration date. There is also an overall checksum at the end of the input string.

A description and examples of the checksum calculation can be found in https://www.icao.int/publications/Documents/9303_p3_cons_en.pdf

Assignment
1. Set the names, document number, nationality and date of birth properties with values parsed from the input string. Validate their lengths and allowed character sets (e.g., a valid date of birth is exactly 6 characters long and contains only decimal characters).
2. Validate the check digit on the document number (the date of birth, expiration date and overall checksum can be ignored for now)
3. Make all unit tests succeed. Do not remove any test cases, adding test cases is allowed.

References that can be used:

https://www.icao.int/publications/Documents/9303_p3_cons_en.pdf
https://pypi.org/project/mrz/
https://en.wikipedia.org/wiki/Machine-readable_passport