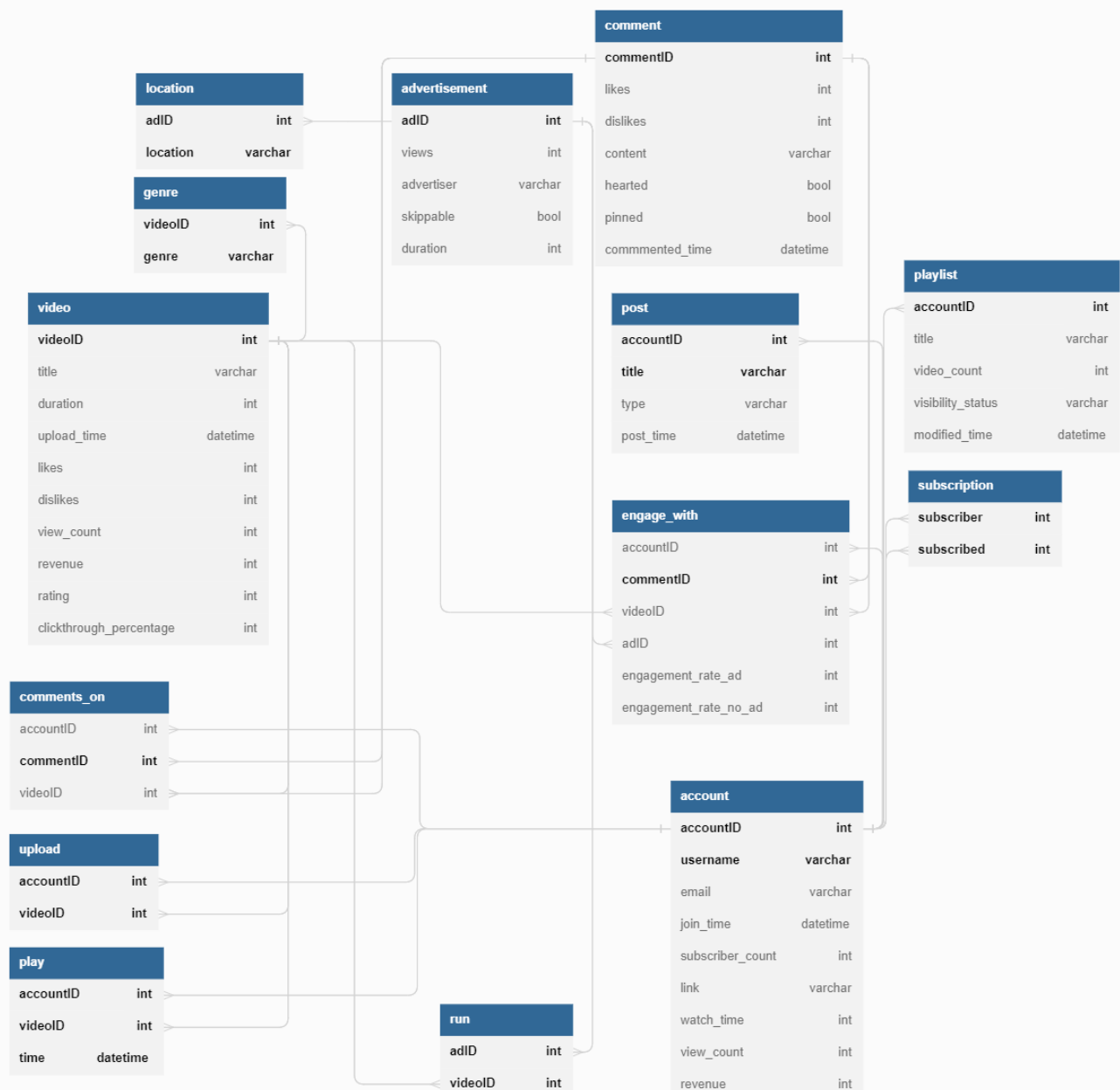


DA Project_Phase_3

Team 20

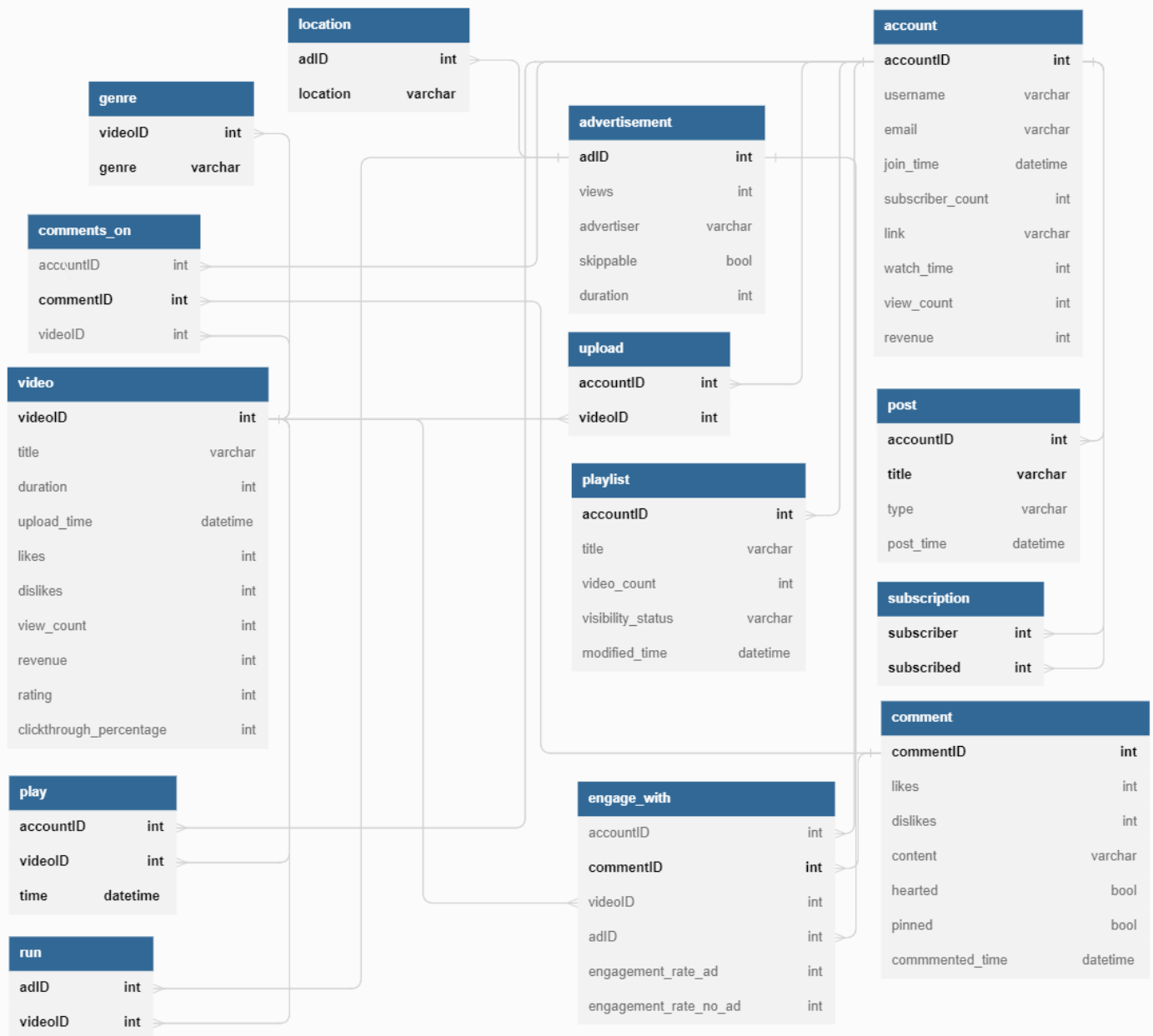
1NF

- For composite attributes, we did not need to convert them into their individual components.
- The only composite attributes in our database were time-related, which were easily taken care of by the DATETIME datatype in MySQL.
- For multivalued attributes, we create a new relation and reference the parent relation using a foreign key.
- Multivalued attributes like *location* and *genre* were converted to their own relations.



2NF

- In the ACCOUNT relation, primary is (accountID, username), which violates fully functional dependency constraint for non-prime attributes.
- To rectify this, we define the *username* to be unique and not null, and drop it as a part of the primary key.



3NF

- No changes were made, the above 2NF form is already in 3NF form as there are no transitive dependencies.

// Other changes:

- The *time* attribute was added to the PLAY relation to differentiate between the same user watching the same video again.
- Attributes *path_thumbnail* and *path_content* were dropped from the video relation to reduce complexity.
- The *description attribute* was dropped from all relations.