## CSC309 Data Model

## Kyle

## October 2024

## Schema

- $\bullet$  User(<u>uID</u>, username, password, name, email, avatar, phone Number, role)
- CodeTemplate(<u>ctID</u>, uID, title, explanation, code, forkID, private) The forkID is the ctID of the original template, null if the template is not forked. **Integrity Constraints:** 
  - $\text{CodeTemplate}[\text{uID}] \subseteq \text{User}[\text{uID}]$
  - CodeTemplate[forkID]  $\subseteq$  CodeTemplate[ctID]
- Blog(<u>bID</u>, uID, title, content, up, down, flags, difference, absDifference, hide) **Integrity Constraints:** 
  - $\operatorname{Blog}[\operatorname{uID}] \subseteq \operatorname{User}[\operatorname{uID}]$
- BlogRating(<u>brID</u>, uID, bID, upvote, downvote) **Integrity Constraints:** 
  - BlogRating[uID]  $\subseteq$  User[uID]
  - BlogRating[bID]  $\subseteq$  Blog[bID]
- CommentRating(<u>crID</u>, uID, bID, upvote, downvote) **Integrity Constraints:** 
  - $\text{CommentRating}[uID] \subseteq \text{User}[uID]$
  - $\text{CommentRating[bID]} \subseteq \text{Blog[bID]}$
- ContentReport(contentRID, uID, bID, cID, reason) Integrity Constraints:
  - $\operatorname{contentRID}[\operatorname{uID}] \subseteq \operatorname{User}[\operatorname{uID}]$
  - $\operatorname{contentRID[bID]} \subseteq \operatorname{Blog[bID]}$
  - $\operatorname{contentRID}[\operatorname{cID}] \subseteq \operatorname{Comment}[\operatorname{cID}]$

- Comment(<u>cID</u>, bID, uID, up, down, content, difference, absDifference, hide, parentCommentID, childComments) **Integrity Constraints**:
  - $\ \mathrm{Comment}[\mathrm{uID}] \subseteq \mathrm{User}[\mathrm{uID}]$
  - $\text{ Comment[bID]} \subseteq \text{Blog[bID]}$
  - $\ Comment[parentCommentID] \subseteq Comment[cID]$
  - $\ Comment[childComments] \subseteq Comment[cID]$
- Tag(tID, bID, ctID, tag) Integrity Constraints:
  - $\ \mathrm{Tag}[\mathrm{ctID}] \subseteq \mathrm{CodeTemplate}[\mathrm{ctID}]$
  - $\operatorname{Tag}[bID] \subseteq \operatorname{Blog}[bID]$