**Group 1**

**Mathematics and Computing**

Aishwarya Gupta – 10012301  
Chirag Maheshwari - 10012315  
Parikshit Upadhyaya – 10012324  
Abhinandan Singh - 10012339

**TABLES & CONSTRAINTS**

user

1. userID :int(5), not null, auto increment
2. username : varchar(30), alternate indexing (B-Tree), not null
3. first name: varchar(30), not null
4. last name: varchar(30), not null
5. emailID: varchar(50), not null
6. password: varchar(165), not null, (because of the SHA-1 algorithm size)
7. profilePicUrl: varchar(100)
8. aboutMe: text
9. PRIMARY KEY(userID)
10. UNIQUE (username)
11. UNIQUE (emailID)
12. INDEX index\_name USING Btree (username)

interests

1. userID: int(5), not null
2. interest: varchar(50), not null
3. PRIMARY KEY(userID, interest)
4. FOREIGN KEY userID REFERENCES user ON DELETE CASCADE ON UPDATE CASCADE

follows

1. follower: int(5), not null
2. followee: int(5), not null
3. PRIMARY KEY(follower, followee)
4. FOREIGN KEY follower REFERENCES user ON DELETE CASCADE ON UPDATE CASCADE
5. FOREIGN KEY followee REFERENCES user ON DELETE CASCADE ON UPDATE CASCADE

article

1. articleID: int(5), not null, auto increment
2. articleFilePath: varchar(100), not null
3. lastModified: timestamp, not null, default CURRENT\_TIMESTAMP
4. PRIMARY KEY(articleID)

writesArticle

1. userID: int(5), not null
2. articleID: int(5), not null
3. version: int(3), not null
4. articleFilePath: varchar(100), not null
5. writtenAt: timestamp, not null, default CURRENT\_TIMESTAMP
6. PRIMARY KEY(userID, articleID, version)
7. FOREIGN KEY userID REFERENCES user ON DELETE CASCADE ON UPDATE CASCADE
8. FOREIGN KEY articleID REFERENCES article ON DELETE CASCADE ON UPDATE CASCADE

activeUsers

1. randomString: char(10), not null
2. userID: int(5), not null
3. ip: char(15)
4. loggedInAt: timestamp, default CURRENT\_TIMESTAMP
5. PRIMARY KEY(randomString, userID)
6. FOREIGN KEY userID REFERENCES user ON DELETE CASCADE ON UPDATE CASCADE

blog

1. userID: int(5), not null, auto increment
2. blogID: int(5), not null
3. blogFilePath: varchar(100), not null
4. writtenAt: timestamp, not null, default CURRENT\_TIMESTAMP
5. PRIMARY KEY(blogID)
6. INDEX index\_name USING Btree (userID)
7. FOREIGN KEY userID REFERENCES user ON DELETE CASCADE ON UPDATE CASCADE

comment

1. commentID: int(3), not null
2. blogID: int(5), not null
3. userID: int(5), not null
4. comment: text, not null
5. writtenAt: timestamp, not null, default CURRENT\_TIMESTAMP
6. PRIMARY KEY(commentID, blogID)
7. INDEX index\_name USING Btree (userID)
8. FOREIGN KEY userID REFERENCES user ON DELETE CASCADE ON UPDATE CASCADE
9. FOREIGN KEY blogID REFERENCES blog ON DELETE CASCADE ON UPDATE CASCADE

reply

1. replyID: int(2), not null
2. commentID: int(3), not null
3. blogID: int(5), not null
4. userID: int(5), not null
5. reply: text, not null
6. writtenAt: timestamp, not null, default CURRENT\_TIMESTAMP
7. PRIMARY KEY(replyID, commentID, blogID)
8. INDEX index\_name USING Btree (userID)
9. FOREIGN KEY userID REFERENCES user ON DELETE CASCADE ON UPDATE CASCADE
10. FOREIGN KEY commentID, blogID REFERENCES comment ON DELETE CASCADE ON UPDATE CASCADE

likes\_dislikes

1. userID: int(5), not null
2. blogID: int(5), not null
3. choice: boolean, not null
4. PRIMARY KEY (userID, blogID)
5. FOREIGN KEY userID REFERENCES user ON DELETE CASCADE ON UPDATE CASCADE
6. FOREIGN KEY blogID REFERENCES blog ON DELETE CASCADE ON UPDATE CASCADE

articleTag

1. articleID: int(5), not null
2. tag: varchar(100), not null
3. PRIMARY KEY (articleID, tag)
4. FOREIGN KEY articleID REFERENCES article ON DELETE CASCADE ON UPDATE CASCADE

blogTag

1. blogID: int(5), not null
2. tag: varchar(100), not null
3. PRIMARY KEY (blogID, tag)
4. FOREIGN KEY blogID REFERENCES blog ON DELETE CASCADE ON UPDATE CASCADE

articleKeyword

1. articleID: int(5), not null
2. keyword: varchar(100), not null
3. occurences: int(2), not null, deafult 0
4. PRIMARY KEY (articleID, keyword)
5. FOREIGN KEY articleID REFERENCES article ON DELETE CASCADE ON UPDATE CASCADE

blogKeyword

1. blogID: int(5), not null
2. keyword: varchar(100), not null
3. occurences: int(2), not null, deafult 0
4. PRIMARY KEY (blogID, keyword)
5. FOREIGN KEY blogID REFERENCES blog ON DELETE CASCADE ON UPDATE CASCADE