**classDiagram**

%% Encje

**class** User **{**

**-**Long id

**-**String username

**-**String email

**-**String password

**-**String profilePicture

**-**String bio

**-**Date createdAt

**-**UserRole role

**}**

**class** UserRole **{**

**<<**enumeration**>>**

ADMIN

CONTENT\_CREATOR

READER

**}**

**class** Post **{**

**-**Long id

**-**String title

**-**String content

**-**Date createdAt

**-**Date updatedAt

**-**boolean published

**-**User author

**-**int viewCount

**-**int likeCount

**+**void addComment**(**Comment**)**

**+**void addTag**(**Tag**)**

**+**void incrementView**()**

**+**void like**()**

**}**

**class** Comment **{**

**-**Long id

**-**String content

**-**Date createdAt

**-**User author

**-**Post post

**-**Comment parentComment

**}**

**class** Like **{**

**-**Long id

**-**User user

**-**Post post

**-**Date createdAt

**}**

**class** Tag **{**

**-**Long id

**-**String name

**+**void addPost**(**Post**)**

**}**

**class** Statistics **{**

**-**Long id

**-**int views

**-**int likes

**-**int comments

**-**Date date

**-**Post post

**+**void incrementViews**()**

**+**void incrementLikes**()**

**+**void incrementComments**()**

**}**

%% Serwisy

**class** UserService **{**

**+**User registerUser**(**User**)**

**+**User getUserById**(**Long**)**

**+**User updateProfile**(**User**)**

**+**List**~**Post**~** getUserPosts**(**Long**)**

**+**boolean canCreatePost**(**User**)**

**+**boolean canModerateContent**(**User**)**

**}**

**class** PostService **{**

**+**Post createPost**(**Post, Long**)**

**+**Post getPostById**(**Long**)**

**+**List**~**Post**~** getRecentPosts**()**

**+**List**~**Post**~** searchPosts**(**String**)**

**+**Post likePost**(**Long, Long**)**

**+**Post getMostLikedPostByUser**(**Long**)**

**+**int getTotalUserLikes**(**Long**)**

**}**

**class** CommentService **{**

**+**Comment createComment**(**Comment, Long, Long**)**

**+**Comment replyToComment**(**Comment, Long, Long**)**

**+**List**~**Comment**~** getCommentsByPost**(**Long**)**

**+**int getTotalUserComments**(**Long**)**

**}**

**class** TagService **{**

**+**Tag createTag**(**Tag**)**

**+**List**~**Post**~** getPostsByTag**(**Long**)**

**+**List**~**Tag**~** getAllTags**()**

**}**

**class** StatisticsService **{**

**+**Statistics recordView**(**Long**)**

**+**Statistics recordLike**(**Long**)**

**+**Statistics recordComment**(**Long**)**

**+**Map**~**String, Integer**~** getPostPerformance**(**Long**)**

**+**Statistics getPostStatistics**(**Long**)**

**}**

**class** AdminService **{**

**+**void removePost**(**Long**)**

**+**void removeComment**(**Long**)**

**+**void manageUserAccount**(**Long, boolean active**)**

**+**List**~**User**~** getAllUsers**()**

**+**List**~**Post**~** getReportedPosts**()**

**}**

%% Kontrolery

**class** HomeController **{**

**+**ResponseEntity getRecentPosts**()**

**+**ResponseEntity searchPosts**(**String**)**

**}**

**class** UserController **{**

**+**ResponseEntity getUserProfile**(**Long**)**

**+**ResponseEntity updateUserProfile**(**User**)**

**+**ResponseEntity getUserPosts**(**Long**)**

**}**

**class** PostController **{**

**+**ResponseEntity getPost**(**Long**)**

**+**ResponseEntity createPost**(**Post**)**

**+**ResponseEntity likePost**(**Long**)**

**+**ResponseEntity getPostComments**(**Long**)**

**}**

**class** CommentController **{**

**+**ResponseEntity addComment**(**Comment, Long**)**

**+**ResponseEntity replyToComment**(**Comment, Long, Long**)**

**}**

**class** AdminController **{**

**+**ResponseEntity removePost**(**Long**)**

**+**ResponseEntity removeComment**(**Long**)**

**+**ResponseEntity manageUserAccount**(**Long, boolean**)**

**+**ResponseEntity getReportedContent**()**

**}**

**class** StatisticsController **{**

**+**ResponseEntity getPostStatistics**(**Long**)**

**+**ResponseEntity getUserStatistics**(**Long**)**

**}**

%% Relacje

User "1" **--** "many" Post **:** tworzy >

User "1" **--** "many" Comment **:** dodaje >

User "1" **--** "many" Like **:** dodaje >

Post "1" **--** "many" Comment **:** zawiera >

Post "many" **--** "many" Tag **:** ma >

Post "1" **--** "many" Statistics **:** śledzi >

Post "1" **--** "many" Like **:** otrzymuje >

Comment "0..1" **--** "many" Comment **:** ma odpowiedzi >

User **--** UserRole **:** posiada >

%% Warstwy

UserService **-->** PostService **:** używa

PostService **-->** CommentService **:** używa

PostService **-->** TagService **:** używa

PostService **-->** StatisticsService **:** używa

AdminService **-->** UserService **:** używa

AdminService **-->** PostService **:** używa

HomeController **-->** PostService **:** używa

UserController **-->** UserService **:** używa

PostController **-->** PostService **:** używa

PostController **-->** CommentService **:** używa

CommentController **-->** CommentService **:** używa

AdminController **-->** AdminService **:** używa

StatisticsController **-->** StatisticsService **:** używa