Hugbúnaðarverkefni 1
Verkefni 3 - UML Class Diagram
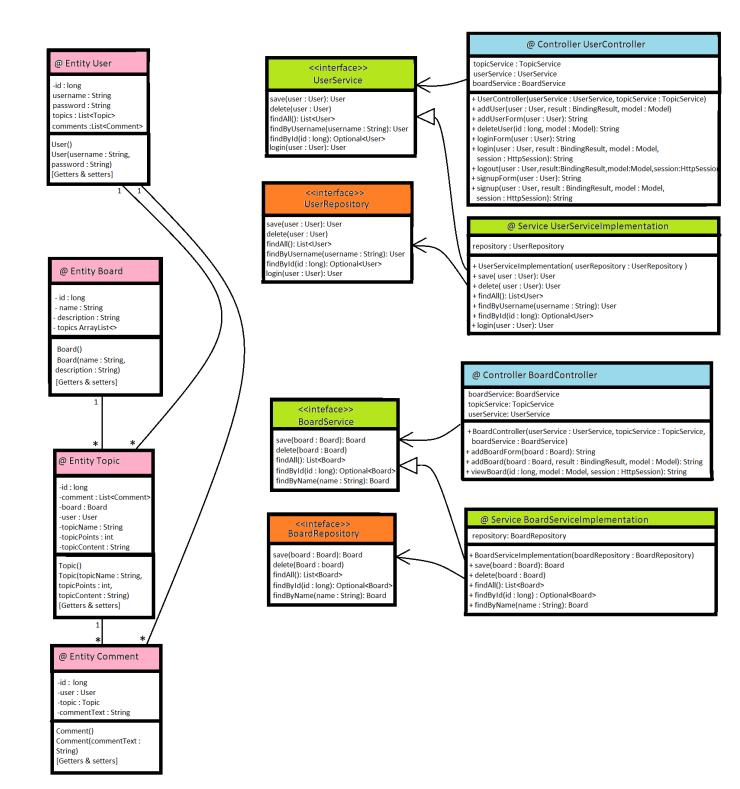
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@ Entity User

-id : long
username : String
password : String
topics : List<Topic>
comments :List<Comment>

User()
User(username : String,
password : String)
[Getters & setters]

@ Entity Board

- id : long
- name : String
- description : String
- topics ArrayList<>

Board()
Board(name : String,
description : String)
[Getters & setters]

@ Entity Topic

-id : long
-comment : List<Comment>
-board : Board
-user : User
-topicName : String
-topicPoints : int
-topicContent : String

Topic()
Topic(topicName : String,
topicPoints : int,
topicContent : String)
[Getters & setters]

@ Entity Comment

-id : long
-user : User
-topic : Topic
-commentText : String

Comment()
Comment(commentText :
String)
[Getters & setters]

<<interface>> UserService

save(user : User): User
delete(user : User)
findAll(): List<User>
findByUsername(username : String): User
findById(id : long): Optional<User>
login(user : User): User

<<interface>> UserRepository

save(user : User): User
delete(user : User)
findAll(): List<User>
findByUsername(username : String): User
findById(id : long): Optional<User>
login(user : User): User

<<inteface>> BoardService

save(board : Board): Board
delete(board : Board)
findAll(): List<Board>
findById(id : long): Optional<Board>
findByName(name : String): Board

<<inteface>> BoardRepository

save(board : Board): Board
delete(Board : board)
findAll(): List<Board>
findById(id : long): Optional<Board>
findByName(name : String): Board

@ Controller UserController

topicService : TopicService
userService : UserService
boardService : BoardService

+ UserController(userService : UserService, topicService : TopicService)
+ addUser(user : User, result : BindingResult, model : Model)
+ addUserForm(user : User): String
+ deleteUser(id : long, model : Model): String
+ loginForm(user : User): String
+ login(user : User, result : BindingResult, model : Model,
 session : HttpSession): String
+ logout(user : User,result:BindingResult,model:Model,session:HttpSession)
+ signupForm(user : User): String
+ signup(user : User, result : BindingResult, model : Model,
 session : HttpSession): String

@ Service UserServiceImplementation

repository : UserRepository

+ UserServiceImplementation(userRepository : UserRepository)
+ save(user : User): User
+ delete(user : User): User
+ findAll(): List<User>
+ findByUsername(username : String): User
+ findById(id : long): Optional<User>
+ login(user : User): User

@ Controller BoardController

boardService: BoardService
topicService: TopicService
userService: UserService

+BoardController(userService : UserService, topicService : TopicService,
 boardService : BoardService)
+ addBoardForm(board : Board): String
+ addBoard(board : Board, result : BindingResult, model : Model): String
+ viewBoard(id : long, model : Model, session : HttpSession): String

@ Service BoardServiceImplementation

repository: BoardRepository

+ BoardServiceImplementation(boardRepository : BoardRepository)
+ save(board : Board): Board
+ delete(board : Board)
+ findAll(): List<Board>
+ findById(id : long) : Optional<Board>
+ findByName(name : String): Board

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@ Controller TopicController

homeController: HomeController
topicService: TopicService
userService: UserService

+ TopicController(userService : UserService, topicService : topicService)
+ createTopic(topic : Topic, result : BindingResult, model : Model): String
+ createTopicForm(topic : Topic): String
+ viewTopicContent(id : long, model : Model): String
+ deleteTopic(id : long, model : Model): String
+addCommentToTopic(comment:Comment,id:long,result:BindingResult,
  model:Model,session:HttpSession): String

<<interface>> TopicService

save(topic : Topic): Topic
delete(topic : Topic)
findAll(): List<Topic>
findById(id : long): Optional<Topic>
findByBoard(id : long): Board
findByUser(id : long): User
findAllByBoardId(id : long)

@ Service TopicServiceImplementation

repository : TopicRepository

+ TopicServiceImplementation(topicRepository : topicRepository)
+ save(topic : Topic): Topic
+ delete(topic : Topic): Topic
+ findAll(): List<Topic>
+ findById(id : long): Optional<Topic>
+ findByBoard(id : long): Board
+ findByUser(id : long): User
+ findAllByBoardId(id : long): List<Topic>

<<interface>> TopicRepository

save(topic : Topic): Topic
delete(topic : Topic)
findAll(): List<Topic>
findById(id : long): Optional<Topic>
findByBoard(id : long): Board
findByUser(id : long): User
findAllByBoardId(id : long):
List<Topic>

@ CommentController

homeController : HomeController
topicService : TopicService
userService : UserService
commentService : CommentService

+ CommentController(commentService : CommentService,
  userService : UserService, topicService : TopicService)

<<interface>> CommentService

save(comment: Comment): Comment
delete(comment : Comment)
findAll(): List<Comment>
findById(id : long): Optional<Comment>
findByTopic(id : long): Topic
findByUser(id : long): User
findAllByTopicId(id : long):
List<Comment>

@ Service CommentServiceImplementation

repository : CommentRepository

+ CommentServiceImpementation(commentRepository:CommentRepository
+ save(comment : Comment): Comment
+ delete(comment : Comment)
+ findAll(): List<Comment>
+ findById(id : long): Optional<Comment>
+ findByTopic(id : long): Topic
+ findByUser(id : long): User
+findAllByTopicId(id : long): List<Comment>

<<interface>> CommentRepository

save(comment: Comment): Comment
delete(comment : Comment)
findAll(): List<Comment>
findById(id : long): Optional<Comment>
findByTopic(id : long): Topic
findByUser(id : long): User
findAllByTopicId(id : long):
List<Comment>