## BunService

- modelMapper: ModelMapper

- storageService: FileSystemStorageService

- bunRepository: BunRepository

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+ createBun(bunDTO): Bun

+ getAllBuns: [Bun]

+ getBunById(id): Bun

+ updateBun(id, bunDTO): Bun

+ updateBunPicture(id, pictureFile): Bun

+ deleteBunById(id)

+ deleteBunPicture(filename)

## IngredientService

- modelMapper: ModelMapper

- ingredientRepository: IngredientRepository

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+ createIngedient(ingredient): Ingredient

+ getAllIngredients: [Ingredient]

+ getIngredientById(id): Ingredient

+ updateIngredient(id, ingredient): Ingredient

+ deleteIngredientById(id)

## FileSystemStorageService

- STORAGELOCATION: string = "upload-dir"

- DIGESTMETHOD: string = "md5"

- ALLOWEDFILEEXTENSIONS: List<String> = [".jpg", ".pn

- ROOTLOCATION: Path

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+ store(file): string

+ load(filename: Path

+ loadAsResource(filename) Resource

+ delete(filename)

+ deleteAll

+ init

## NewsItemService

- modelMapper: ModelMapper

- storageService: FileSystemStorageService

- newsItemRepository: NewsItemRepository

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+ createNewsItem(newsItemDTO): NewsItem

+ getAllNewsItems: [NewsItem]

+ getNewsItemById(id): NewsItem

+ updateNewsItem(id, newsItemDTO): NewsItem

+ updateNewsItemPicture(id, pictureFile): NewsItem

+ deleteNewsItemById(id)

+ deleteNewsItemPicture(filename)

## LoafService

- modelMapper: ModelMapper

- storageService: FileSystemStorageService

- loafRepository: LoafRepository

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+ createLoaf(loafDTO): Loaf

+ getAllLoafs: [Loaf]

+ getLoafById(id): Loaf

+ updateLoaf(id, loafDTO): Loaf

+ updateLoafPicture(id, pictureFile): Loaf

+ deleteLoafById(id)

+ deleteLoafPicture(filename)

## ApplicationUserService

- userRepository: UserRepository

- jwtTokenProvider: JwtTokenProvider

- passwordEncoder: PasswordEncoder

- authenticationManager: AuthenticationManager

- minPasswordLength: int

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+ createUser(applicationUser): ApplicationUser

+ getAllUsers: [ApplicationUser]

+ getUserById(id): ApplicationUser

+ getUserByUsername(username): ApplicationUser

+ login(username, password): string

+ whoAmI(httpRequest): ApplicationUser

+ isValidUsername(username): boolean