IIKH

Interactive Intelligent Kitchen Helper

TEAM 1

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What IIKH do?

- Search Recipe DB
- Add new Recipe
- Plan a meal

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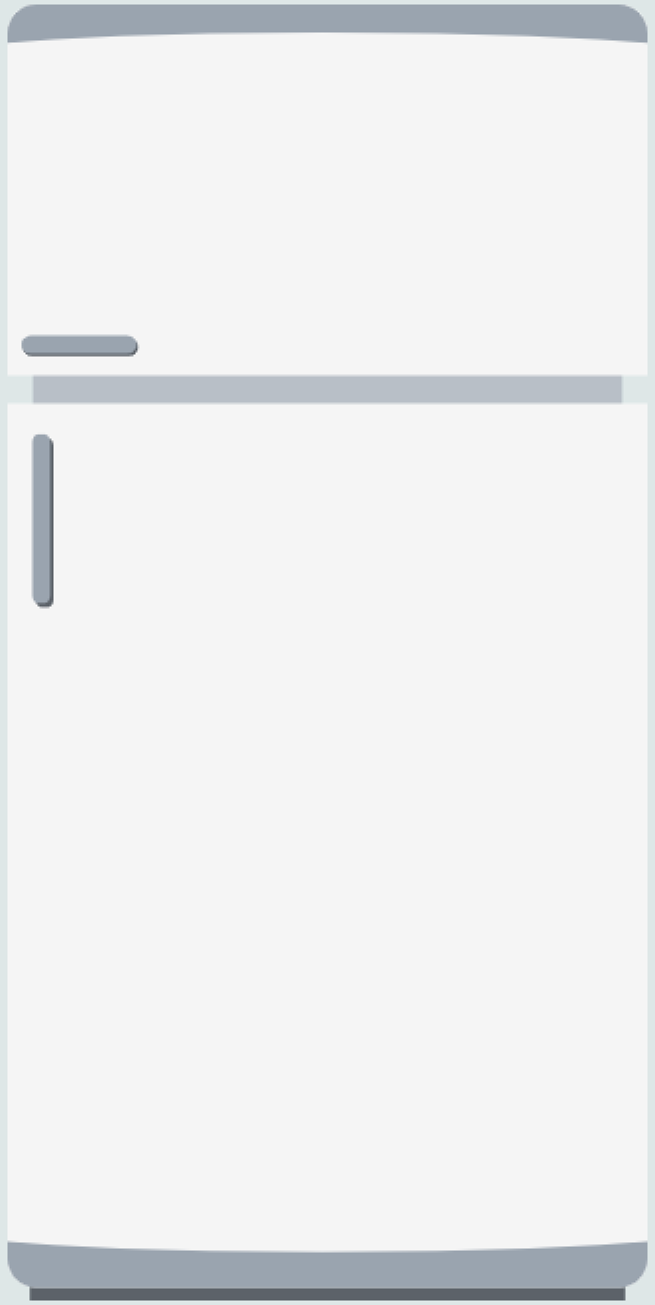
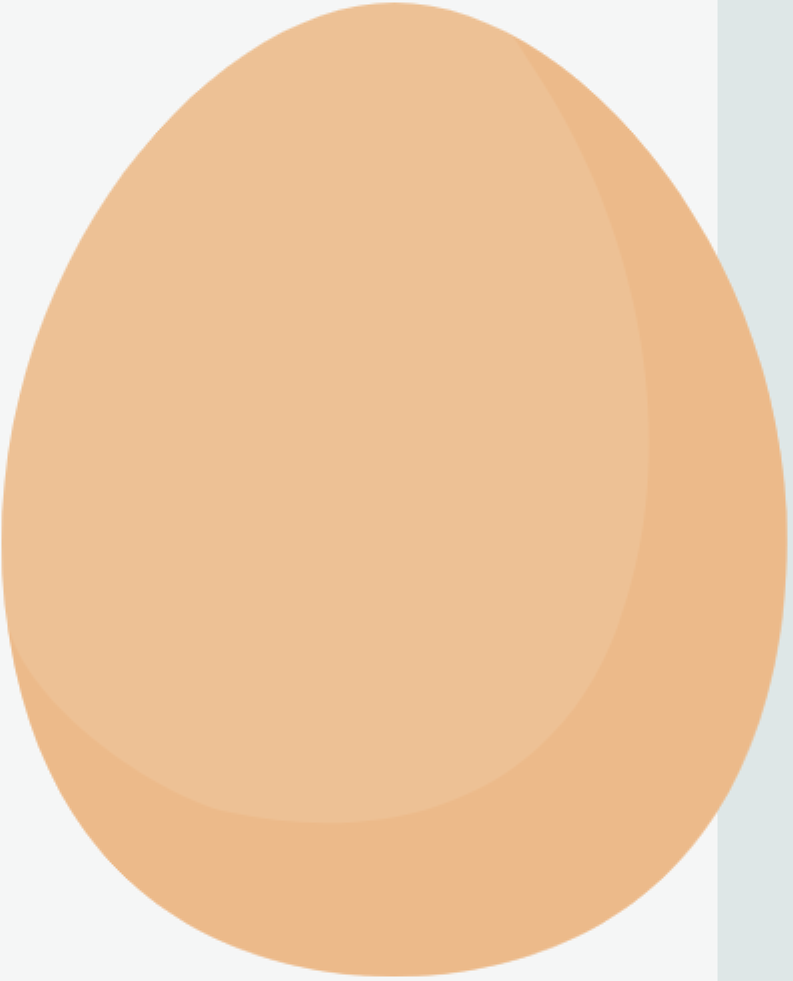
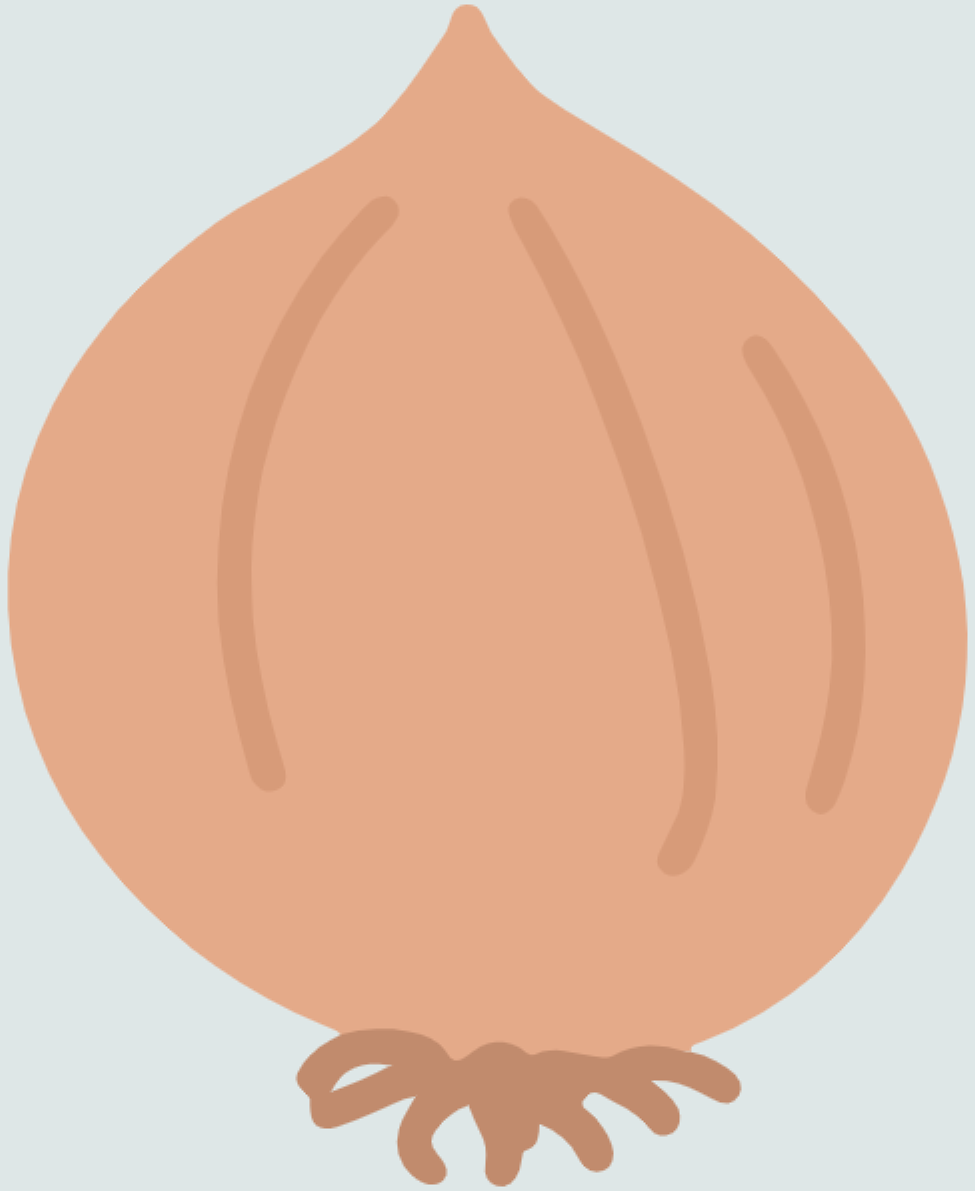
What IIKH do? _ Scenario



What IIKH do? _ Scenario





What IIKH do? _ Scenario

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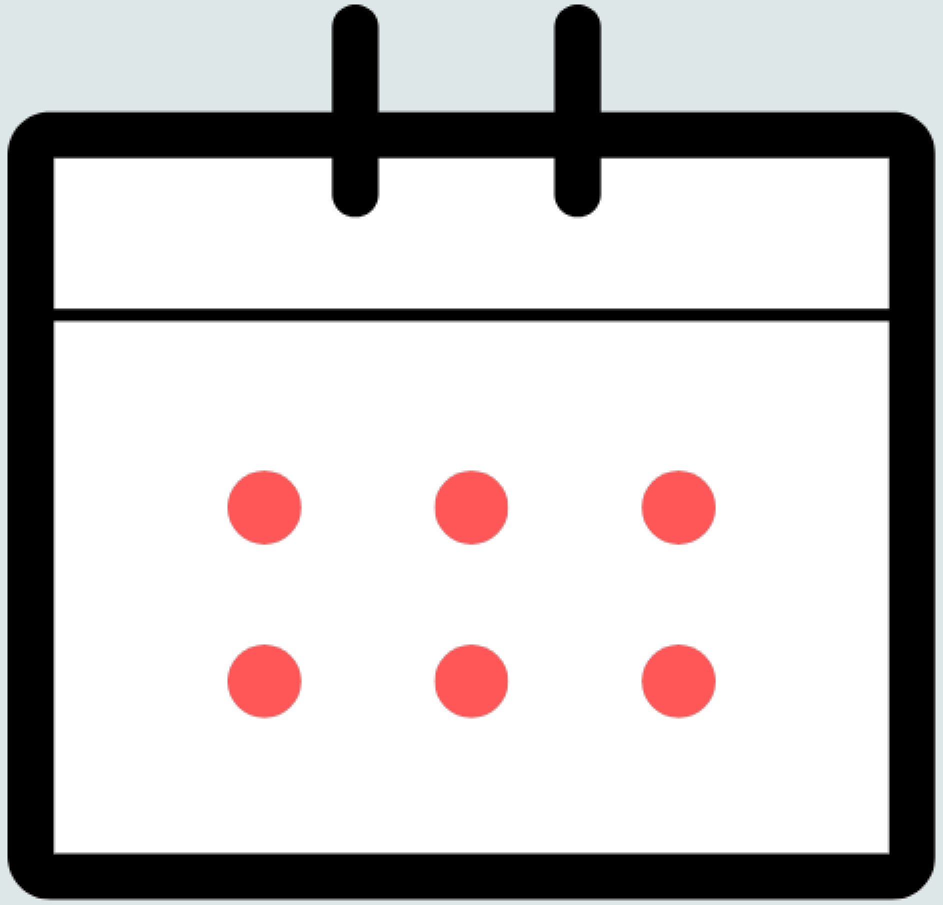


What IIKH do? _ Scenario

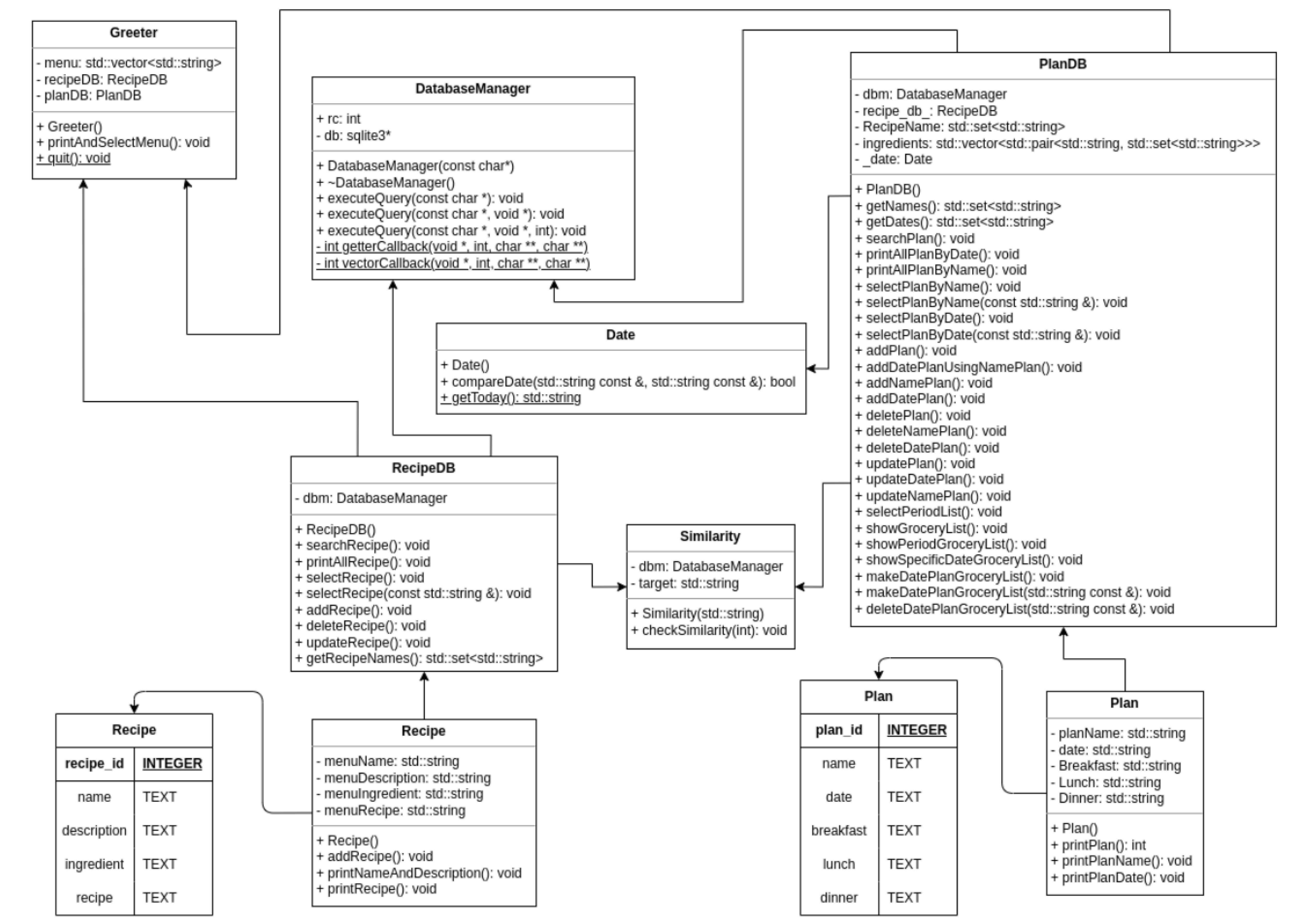
What IIKH do?

- Search Recipe/Plan from DB
- Add new Recipe/Plan
- Delete Recipe/Plan
- Update Recipe/Plan
- Print Grocery Lists

DB - SQLite

- Stability and Speed
- Light db for simple table structure in IIKH program
- File-based
- C++ library support

UML



Greeter

- menu: std::vector<std::string>
- recipeDB: RecipeDB
- planDB: PlanDB

+ Greeter()
+ printAndSelectMenu(): void
+ quit(): void

DatabaseManager

+ rc: int
- db: sqlite3*

+ DatabaseManager(const char*)
+ ~DatabaseManager()
+ executeQuery(const char *): void
+ executeQuery(const char *, void *): void
+ executeQuery(const char *, void *, int): void
- int getterCallback(void *, int, char **, char **)
- int vectorCallback(void *, int, char **, char **)

PlanDB

- dbm: DatabaseManager
- recipe_db_: RecipeDB
- RecipeName: std::set<std::string>
- ingredients: std::vector<std::pair<std::string, std::set<std::string>>>
- _date: Date

+ PlanDB()
+ getNames(): std::set<std::string>
+ getDates(): std::set<std::string>
+ searchPlan(): void
+ printAllPlanByDate(): void
+ printAllPlanByName(): void
+ selectPlanByName(): void
+ selectPlanByName(const std::string &): void
+ selectPlanByDate(): void
+ selectPlanByDate(const std::string &): void
+ addPlan(): void
+ addDatePlanUsingNamePlan(): void
+ addNamePlan(): void
+ addDatePlan(): void
+ deletePlan(): void
+ deleteNamePlan(): void
+ deleteDatePlan(): void
+ updatePlan(): void
+ updateDatePlan(): void
+ updateNamePlan(): void
+ selectPeriodList(): void
+ showGroceryList(): void
+ showPeriodGroceryList(): void
+ showSpecificDateGroceryList(): void
+ makeDatePlanGroceryList(): void
+ makeDatePlanGroceryList(std::string const &): void
+ deleteDatePlanGroceryList(std::string const &): void

Date

+ Date()
+ compareDate(std::string const &, std::string const &): bool
+ getToday(): std::string

RecipeDB

- dbm: DatabaseManager

+ RecipeDB()
+ searchRecipe(): void
+ printAllRecipe(): void
+ selectRecipe(): void
+ selectRecipe(const std::string &): void
+ addRecipe(): void
+ deleteRecipe(): void
+ updateRecipe(): void
+ getRecipeNames(): std::set<std::string>

Similarity

- dbm: DatabaseManager
- target: std::string

+ Similarity(std::string)
+ checkSimilarity(int): void

Recipe

recipe_id	INTEGER
name	TEXT
description	TEXT
ingredient	TEXT
recipe	TEXT

Recipe

- menuName: std::string
- menuDescription: std::string
- menuIngredient: std::string
- menuRecipe: std::string

+ Recipe()
+ addRecipe(): void
+ printNameAndDescription(): void
+ printRecipe(): void

Plan

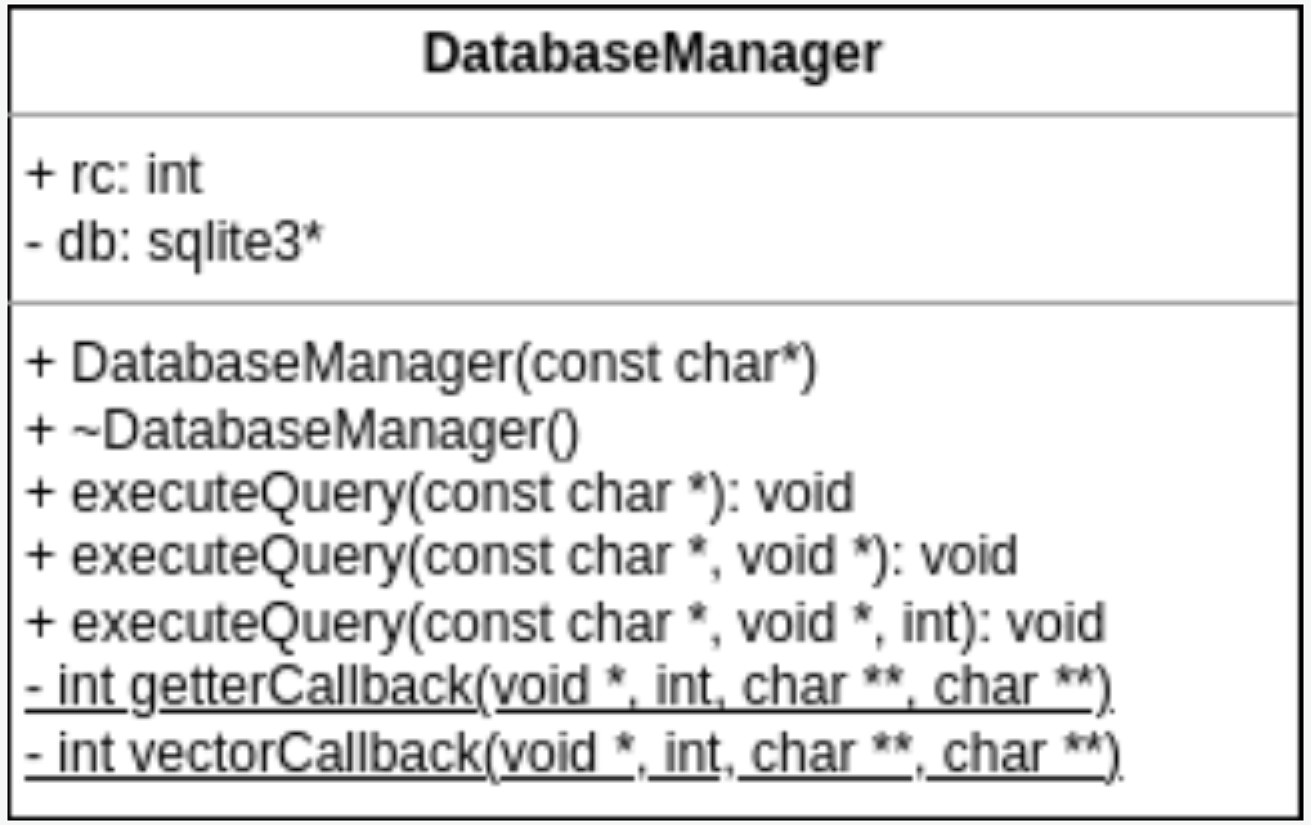
plan_id	INTEGER
name	TEXT
date	TEXT
breakfast	TEXT
lunch	TEXT
dinner	TEXT

Plan

- planName: std::string
- date: std::string
- Breakfast: std::string
- Lunch: std::string
- Dinner: std::string

+ Plan()
+ printPlan(): int
+ printPlanName(): void
+ printPlanDate(): void

DatabaseManager

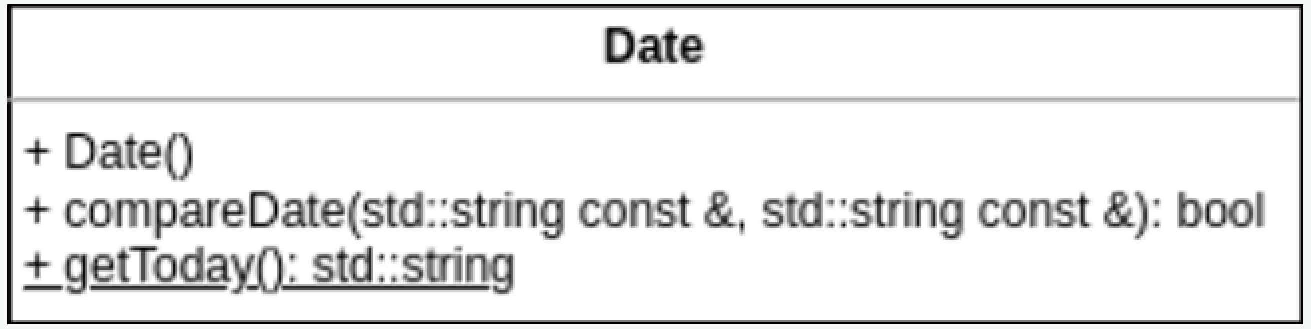


DatabaseManager

+ rc: int
- db: sqlite3*

+ DatabaseManager(const char*)
+ ~DatabaseManager()
+ executeQuery(const char *): void
+ executeQuery(const char *, void *): void
+ executeQuery(const char *, void *, int): void
- int getterCallback(void *, int, char **, char **)
- int vectorCallback(void *, int, char **, char **)

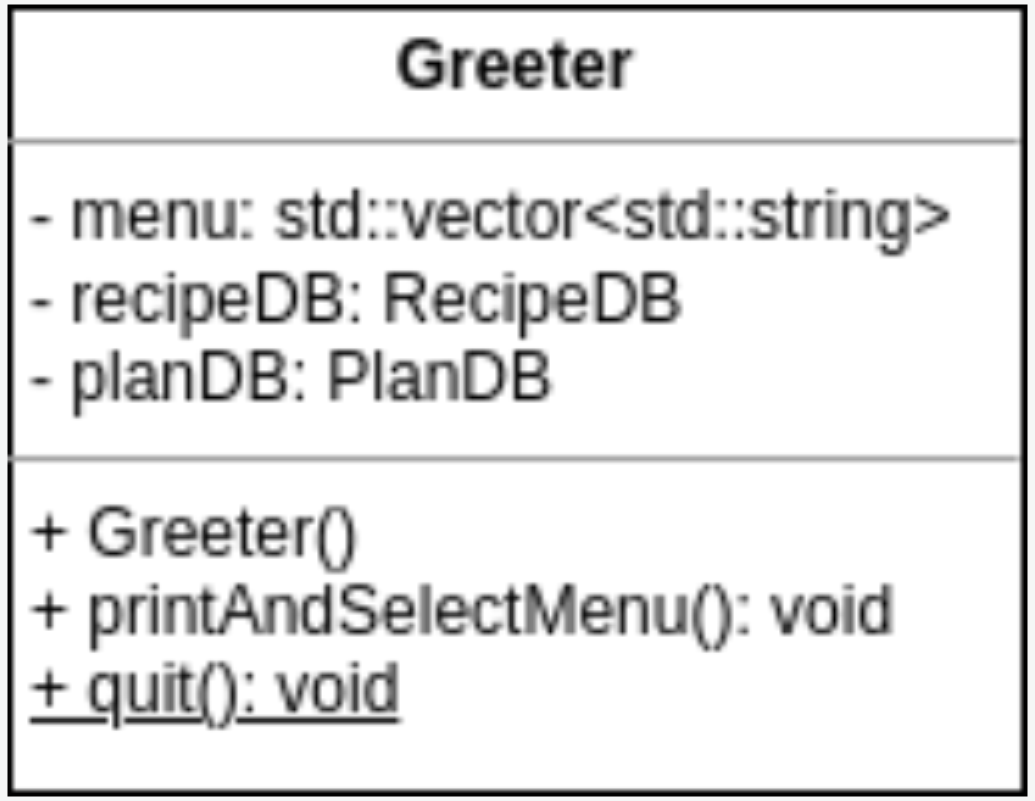
Date



Date

+ Date()
+ compareDate(std::string const &, std::string const &): bool
+ getToday(): std::string

Greeter



Greeter

- menu: std::vector<std::string>
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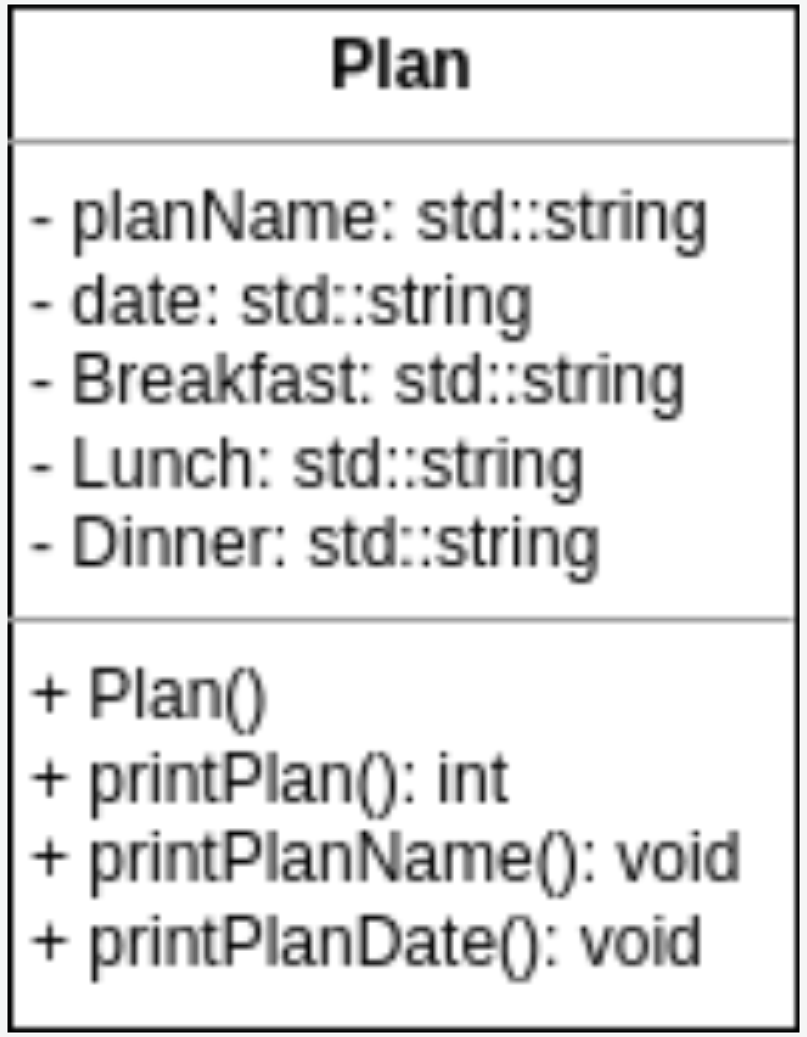
+ Greeter()
+ printAndSelectMenu(): void
+ quit(): void

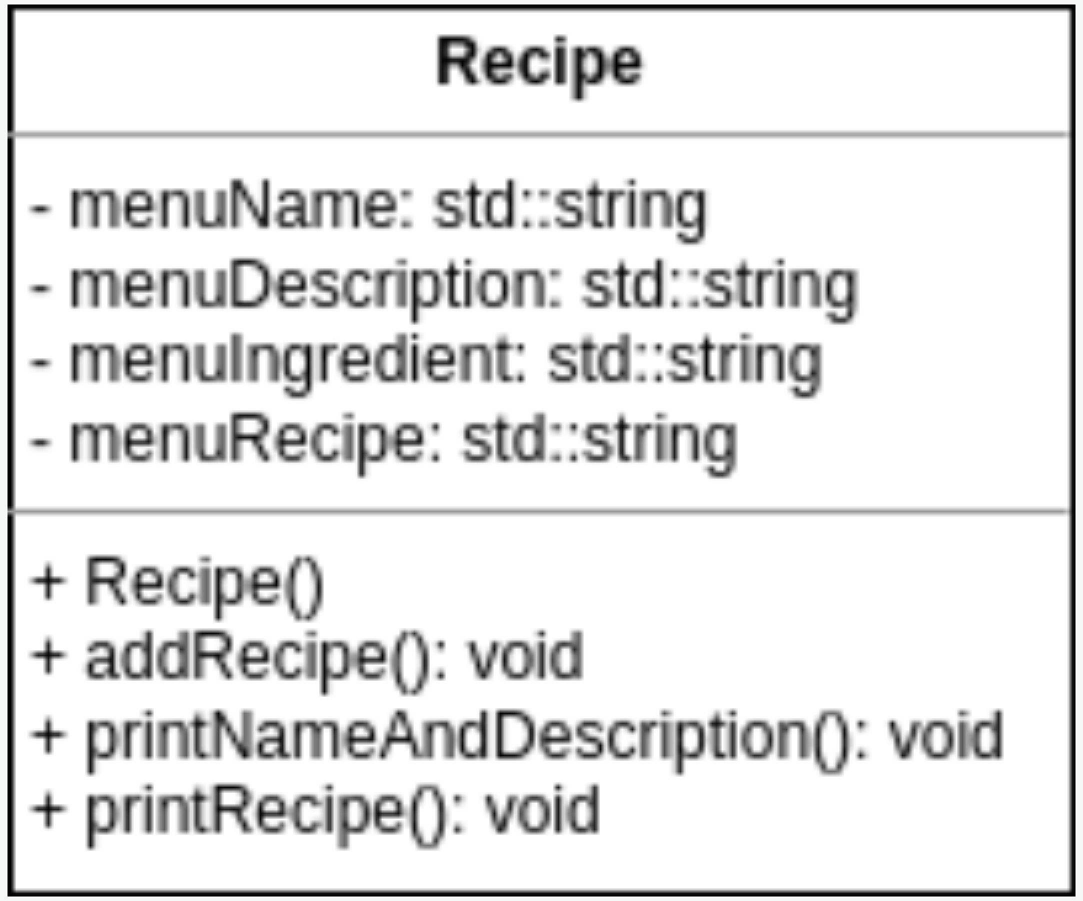
Plan, Recipe



Plan

- planName: std::string
- date: std::string
- Breakfast: std::string
- Lunch: std::string
- Dinner: std::string

+ Plan()
+ printPlan(): int
+ printPlanName(): void
+ printPlanDate(): void

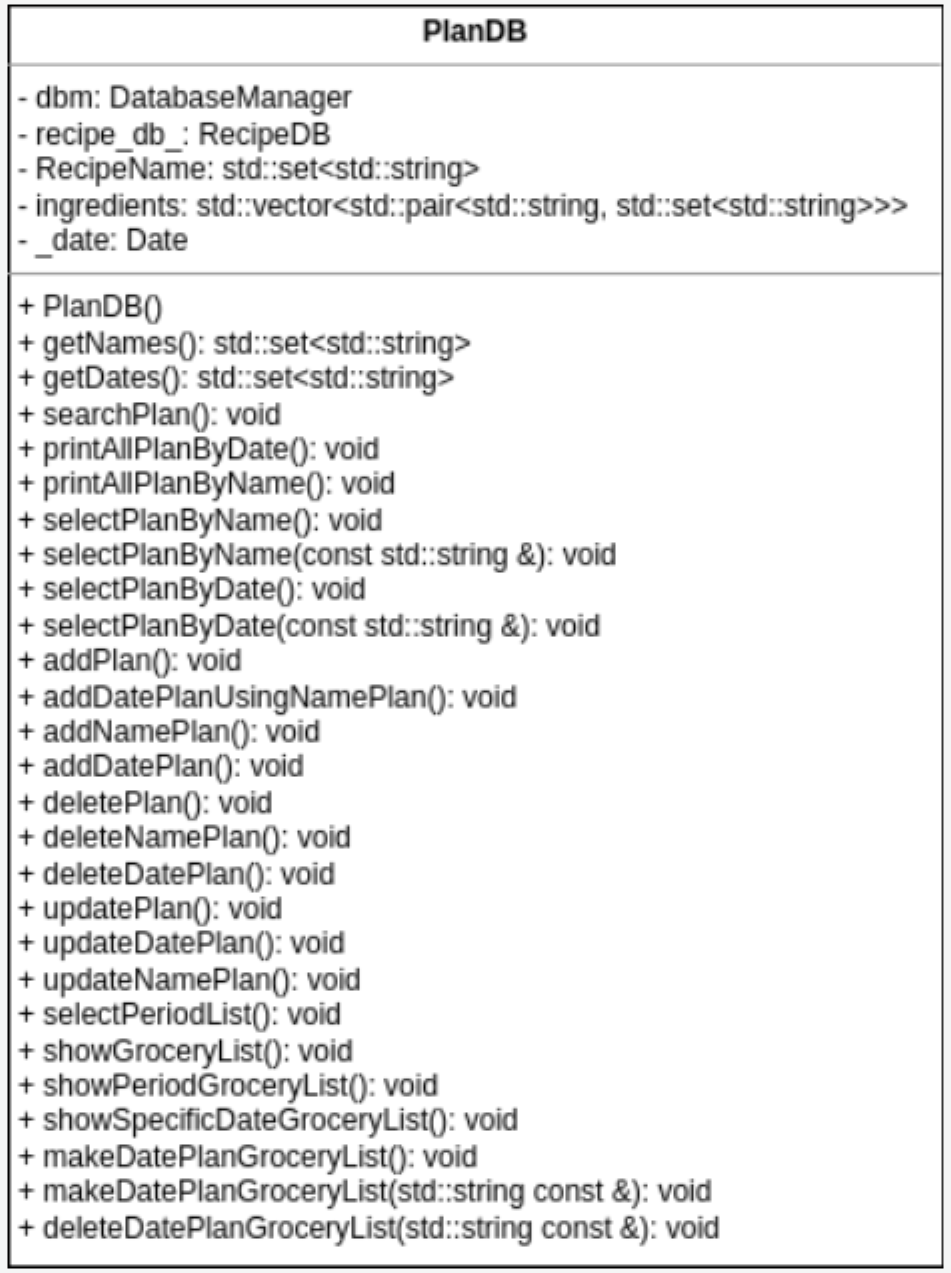


Recipe

- menuName: std::string
- menuDescription: std::string
- menuIngredient: std::string
- menuRecipe: std::string

+ Recipe()
+ addRecipe(): void
+ printNameAndDescription(): void
+ printRecipe(): void

PlanDB, RecipeDB



```
PlanDB
- dbm: DatabaseManager
- recipe_db_: RecipeDB
- RecipeName: std::set<std::string>
- ingredients: std::vector<std::pair<std::string, std::set<std::string>>>
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+ makeDatePlanGroceryList(std::string const &): void
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```
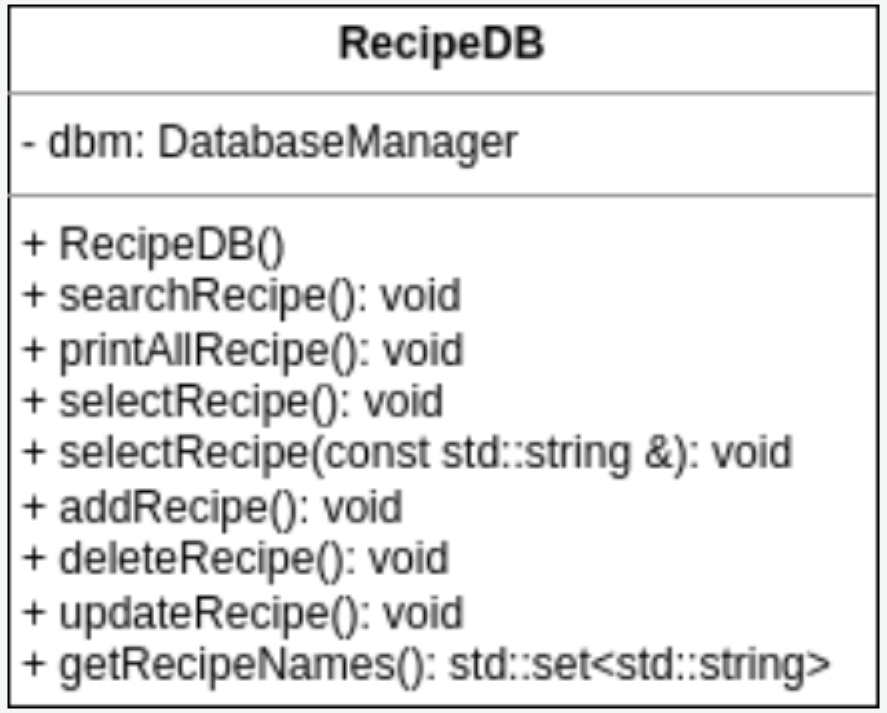
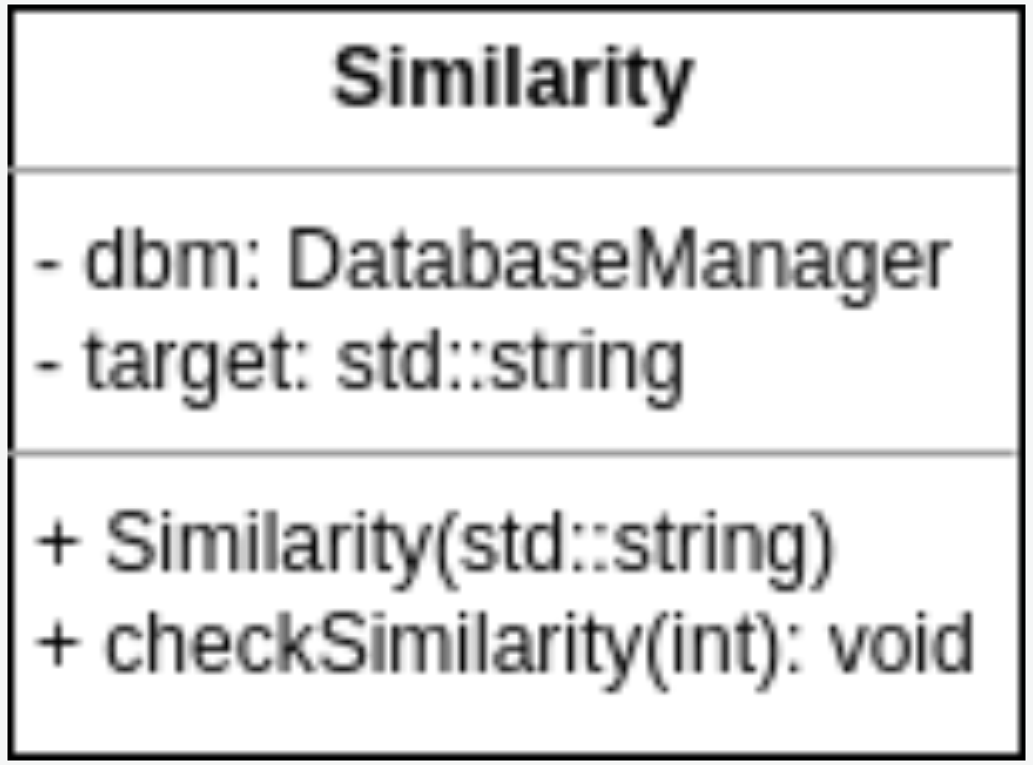



```
RecipeDB
- dbm: DatabaseManager
+ RecipeDB()
+ searchRecipe(): void
+ printAllRecipe(): void
+ selectRecipe(): void
+ selectRecipe(const std::string &): void
+ addRecipe(): void
+ deleteRecipe(): void
+ updateRecipe(): void
+ getRecipeNames(): std::set<std::string>
```

Similarity



Similarity

- dbm: DatabaseManager
- target: std::string

+ Similarity(std::string)
+ checkSimilarity(int): void

Concepts for OOP

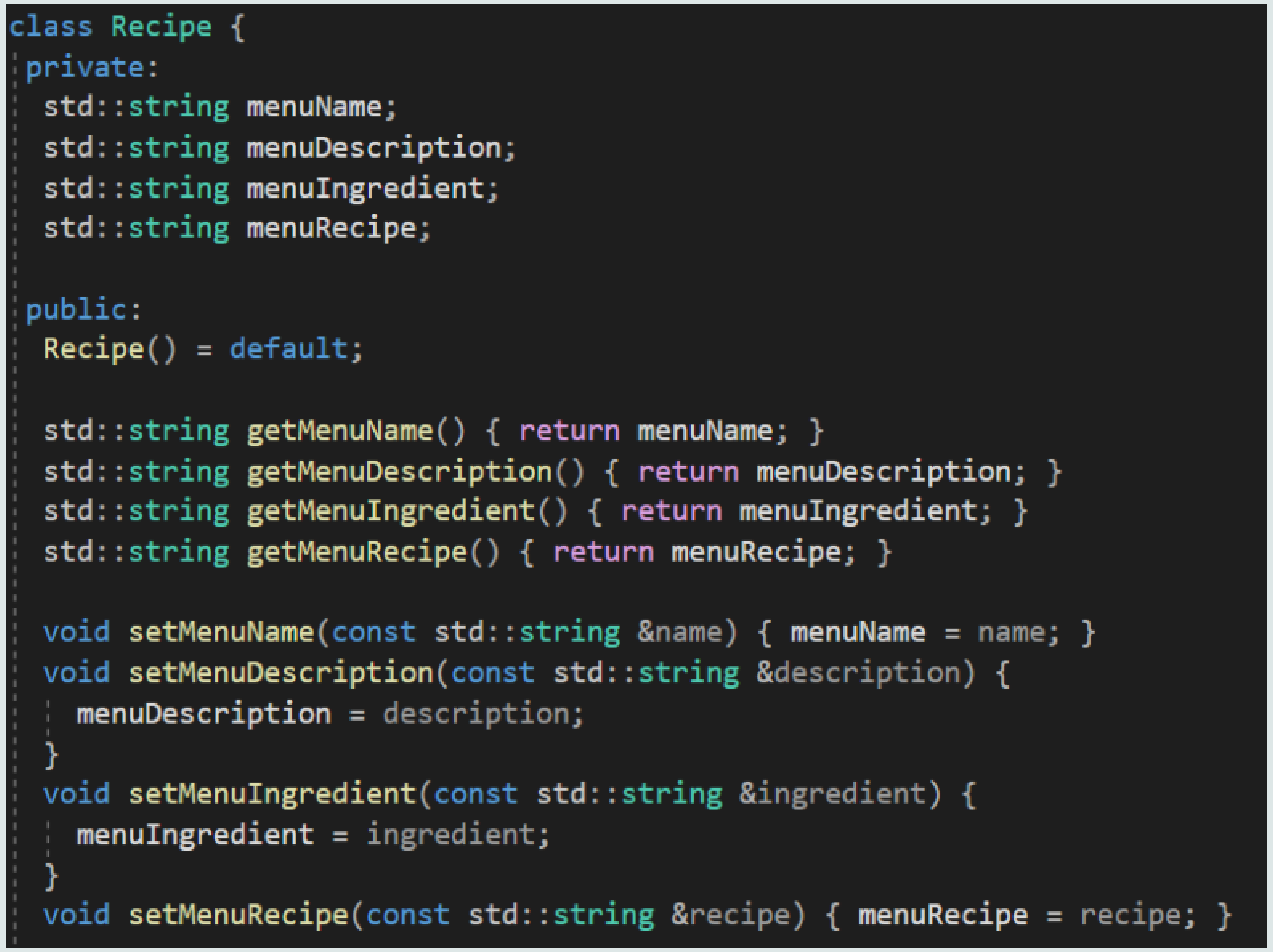
Encapsulation

Function Overloading

Encapsulation

Implementation independence

Information hiding

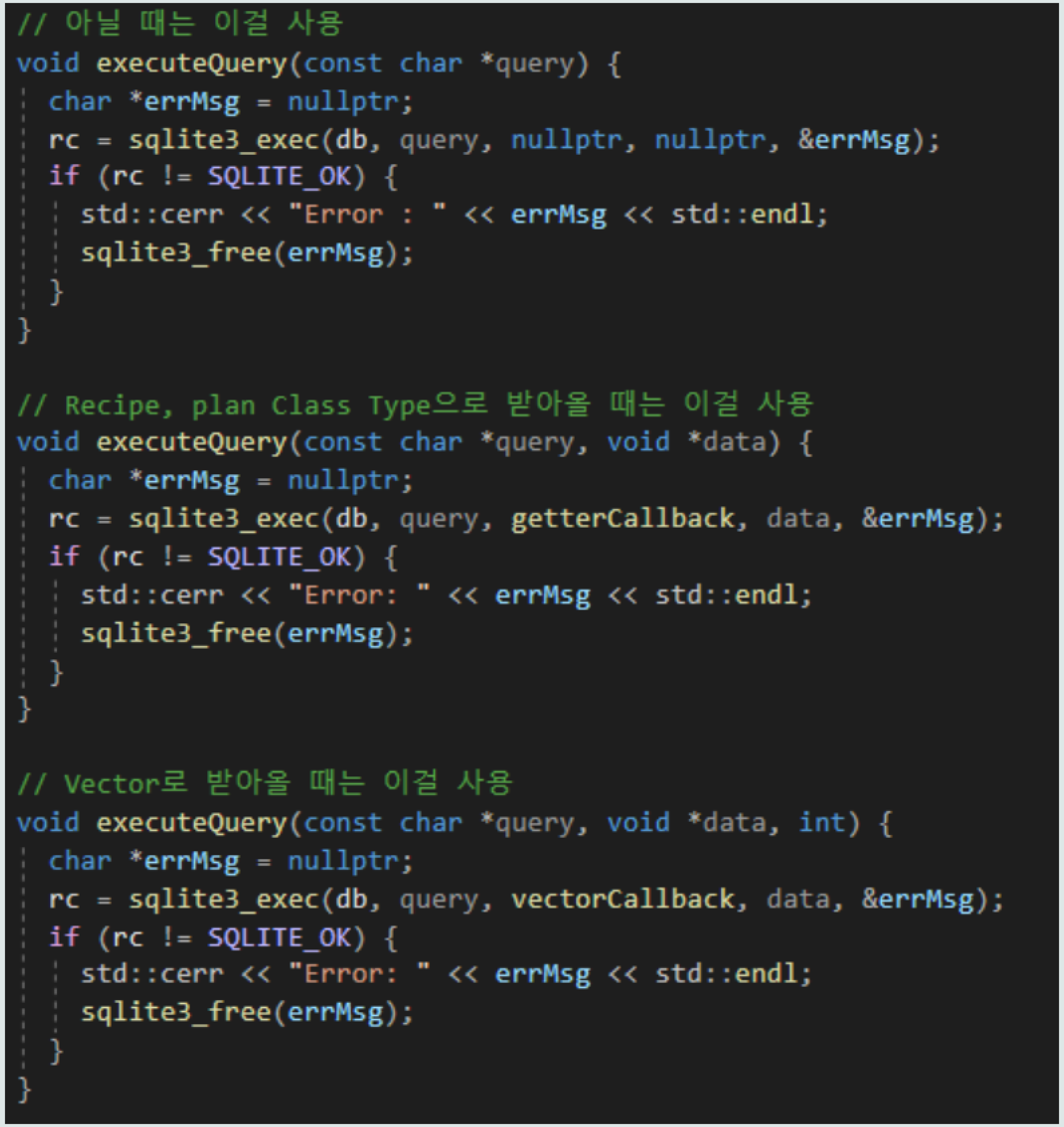


```
class Recipe {
 private:
  std::string menuName;
  std::string menuDescription;
  std::string menuIngredient;
  std::string menuRecipe;

 public:
  Recipe() = default;

  std::string getMenuName() { return menuName; }
  std::string getMenuDescription() { return menuDescription; }
  std::string getMenuIngredient() { return menuIngredient; }
  std::string getMenuRecipe() { return menuRecipe; }

  void setMenuName(const std::string &name) { menuName = name; }
  void setMenuDescription(const std::string &description) {
    menuDescription = description;
  }
  void setMenuIngredient(const std::string &ingredient) {
    menuIngredient = ingredient;
  }
  void setMenuRecipe(const std::string &recipe) { menuRecipe = recipe; }
```

Function Overloading

Diversify acceptable parameter

Reuse funtions



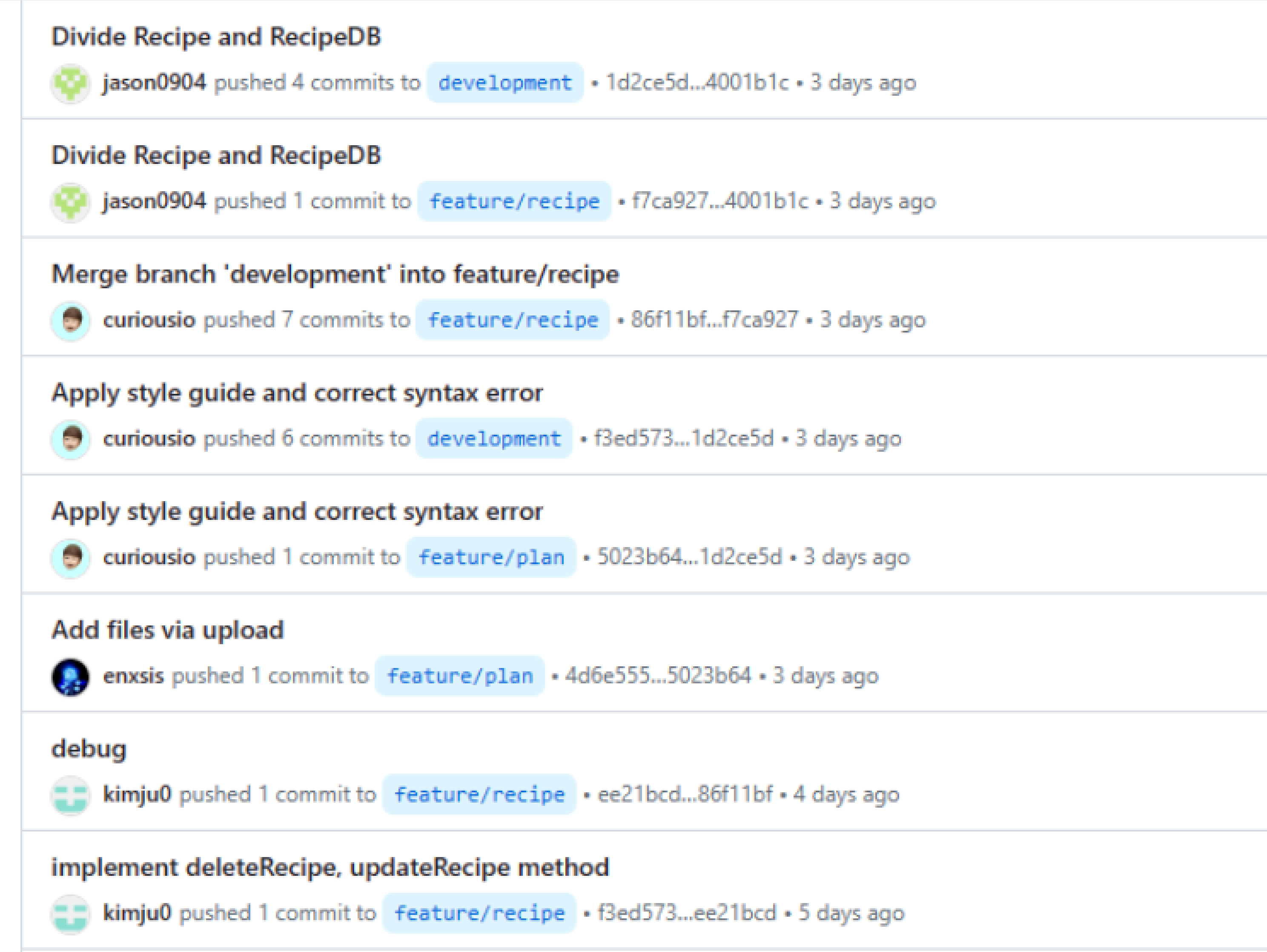
```
// 아닐 때는 이걸 사용
void executeQuery(const char *query) {
  char *errMsg = nullptr;
  rc = sqlite3_exec(db, query, nullptr, nullptr, &errMsg);
  if (rc != SQLITE_OK) {
    std::cerr << "Error : " << errMsg << std::endl;
    sqlite3_free(errMsg);
  }
}

// Recipe, plan Class Type으로 받아올 때는 이걸 사용
void executeQuery(const char *query, void *data) {
  char *errMsg = nullptr;
  rc = sqlite3_exec(db, query, getterCallback, data, &errMsg);
  if (rc != SQLITE_OK) {
    std::cerr << "Error: " << errMsg << std::endl;
    sqlite3_free(errMsg);
  }
}

// Vector로 받아올 때는 이걸 사용
void executeQuery(const char *query, void *data, int) {
  char *errMsg = nullptr;
  rc = sqlite3_exec(db, query, vectorCallback, data, &errMsg);
  if (rc != SQLITE_OK) {
    std::cerr << "Error: " << errMsg << std::endl;
    sqlite3_free(errMsg);
  }
}
```

Demo

Efforts for efficient collaboration

- Working separately in a branch by function
- Provide excutable files
- Update version frequently

Focus Efficiency and Sustainability beyond development



Divide Recipe and RecipeDB
jason0904 pushed 4 commits to `development` • 1d2ce5d...4001b1c • 3 days ago

Divide Recipe and RecipeDB
jason0904 pushed 1 commit to `feature/recipe` • f7ca927...4001b1c • 3 days ago

Merge branch 'development' into feature/recipe
curiousio pushed 7 commits to `feature/recipe` • 86f11bf...f7ca927 • 3 days ago

Apply style guide and correct syntax error
curiousio pushed 6 commits to `development` • f3ed573...1d2ce5d • 3 days ago

Apply style guide and correct syntax error
curiousio pushed 1 commit to `feature/plan` • 5023b64...1d2ce5d • 3 days ago

Add files via upload
enxsis pushed 1 commit to `feature/plan` • 4d6e555...5023b64 • 3 days ago

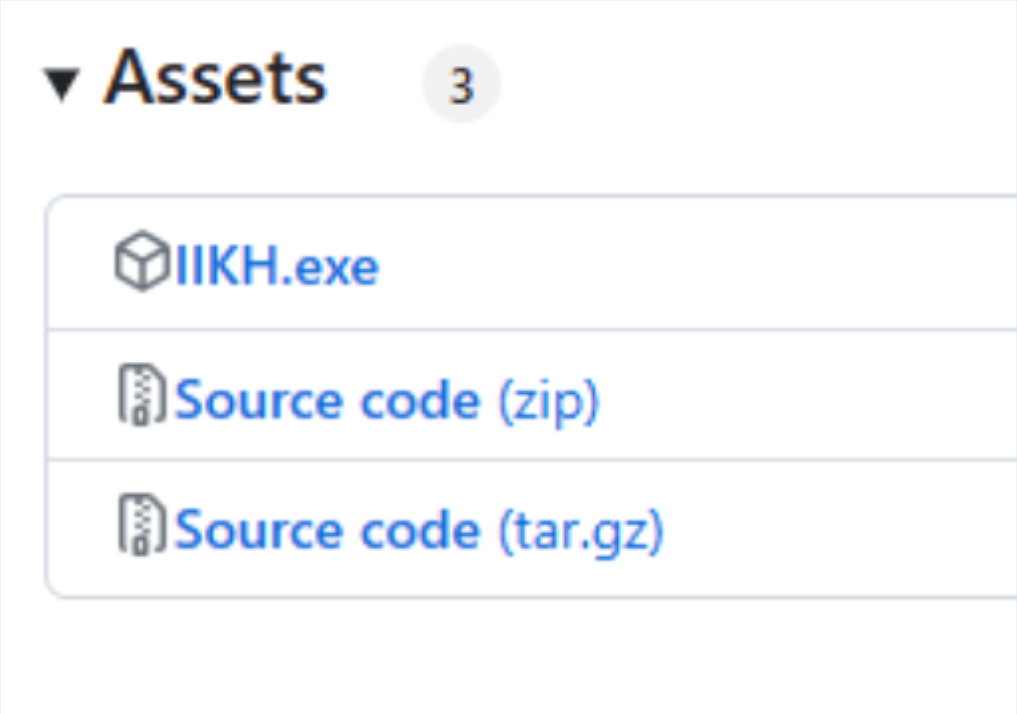
debug
kimju0 pushed 1 commit to `feature/recipe` • ee21bcd...86f11bf • 4 days ago

implement deleteRecipe, updateRecipe method
kimju0 pushed 1 commit to `feature/recipe` • f3ed573...ee21bcd • 5 days ago

Efforts for efficient collaboration

- Working separately in a branch by function
- Provide excutable files
- Update version frequently

Focus Efficiency and Sustainability beyond development



▾ Assets 3

IIKH.exe

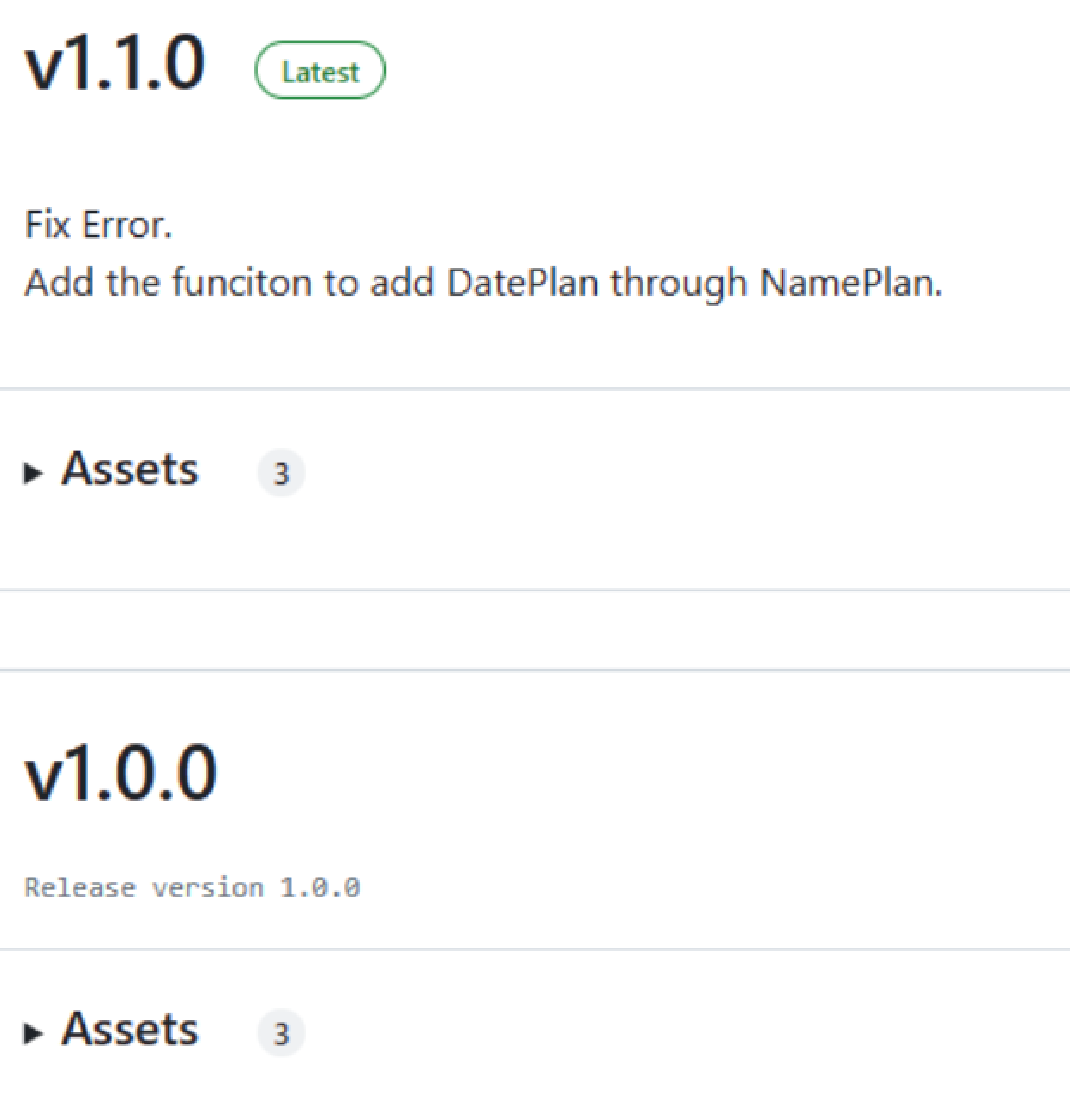
Source code (zip)

Source code (tar.gz)

Efforts for efficient collaboration

- Working separately in a branch by function
- Provide excutable files
- Update version frequently

Focus Efficiency and Sustainability beyond development



v1.1.0 Latest

Fix Error.
Add the funciton to add DatePlan through NamePlan.

▸ Assets 3

v1.0.0

```
Release version 1.0.0
```

▸ Assets 3

Thank you