Meal Planner Class Diagram (Refined UML)

User
```
-id: int
-name: string
```
```
+addRecipe(recipe: Recipe): void
+addMealPlan(plan: MealPlan): void
+shareMealPlan(plan: MealPlan, user: User): void
```

MealPlan
```
-id: int
-entries: PlanEntry[]
```
```
+addEntry(entry: PlanEntry): void
+getRecipeIds(): int[]
```

MealPlannerService
```
+addRecipe(user: User, recipe: Recipe): void
+addMealPlan(user: User, plan: MealPlan): void
+shareMealPlan(plan: MealPlan, owner: User, target: User): void
+generateShoppingList(mealPlan: MealPlan): string[]
```

PlanEntry
```
-day: string
-recipeId: int
```
```
+setRecipe(recipeId: int): void
```

Repository
```
+save(entity: Object): void
+findById(id: int): Object
```

ShoppingListGenerator
```
+generate(mealPlan: MealPlan): string[]
```

Recipe
```
-id: int
-title: string
-ingredients: Ingredient[]
-tags: string[]
```
```
+rate(rating: int): void
+delete(): void
```

Ingredient
```
-name: string
-amount: string
```

Relationships:

- User "1" → "0..*" MealPlan : owns
- User "1" → "0..*" Recipe : owns
- User ⇠ MealPlannerService : uses
- MealPlan "1" → "1..*" PlanEntry : contains
- PlanEntry "1" → "1" Recipe : references
- MealPlannerService → Repository : accesses
- MealPlannerService → ShoppingListGenerator : uses
- Recipe "1" → "1..*" Ingredient : includes