RWA3 Class Diagram

Department
```
-employees_: std::unordered_set
```
```
+Department(): void
+display_employees(): void
+add_employee(Employee): void
```

0..1

▼ employs

*

A Employee
```
#name_: std::string
#salary_: int
#idbadge_: IDBadge
```
```
+Employee(const std::string& name, int salary, const IDBadge& idbadge): void
+virtual perform_task() = 0: void
+virtual attend_meeting(): void
+virtual receive_salary(): void
+return_name(): std::string
+return_badge_info(): void
```

◄ has «unique»   +public   +public

1

IDBadge
```
-badge_number_: std::string
-issue_date: Date
```
```
+IDBadge(const std::string& badge_number, const Date& issue_date): void
+display_badge_info(): void
```

▼ has_issue_date«value»

1

Date
```
-day_: unsigned short
-month_: unsigned short
-year_: unsigned short
```
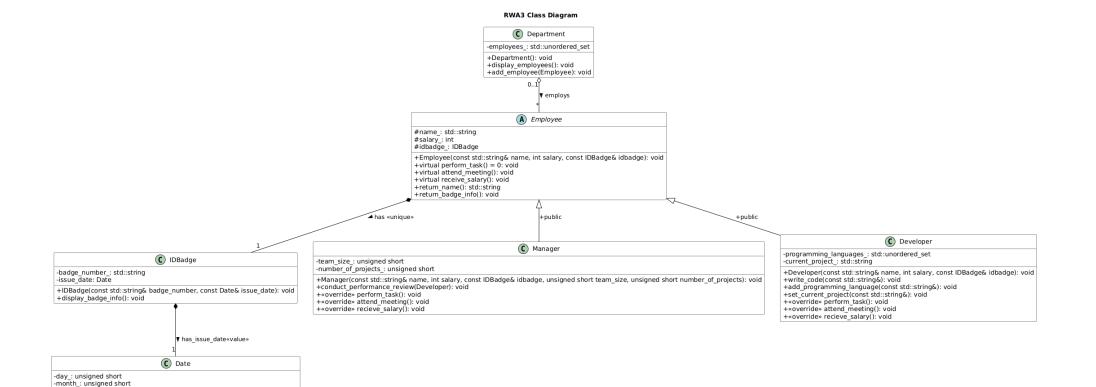```
+Date(unsigned short day, unsigned short month, unsigned short year): void
+is_valid_date(): bool
+get_days_in_month(): unsigned short
+is_leap_year(): bool
+print_date(): void
```

**Manager**
```
-team_size_: unsigned short
-number_of_projects_: unsigned short
```
```
+Manager(const std::string& name, int salary, const IDBadge& idbadge, unsigned short team_size, unsigned short number_of_projects): void
+conduct_performance_review(Developer): void
+«override» perform_task(): void
+«override» attend_meeting(): void
+«override» recieve_salary(): void
```

**Developer**
```
-programming_languages_: std::unordered_set
-current_project_: std::string
```
```
+Developer(const std::string& name, int salary, const IDBadge& idbadge): void
+write_code(const std::string&): void
+add_programming_language(const std::string&): void
+set_current_project(const std::string&): void
+«override» perform_task(): void
+«override» attend_meeting(): void
+«override» recieve_salary(): void
```