# Sri Lanka Institute of Information Technology

Project Progressive Report
Information Technology Project (IT2080)
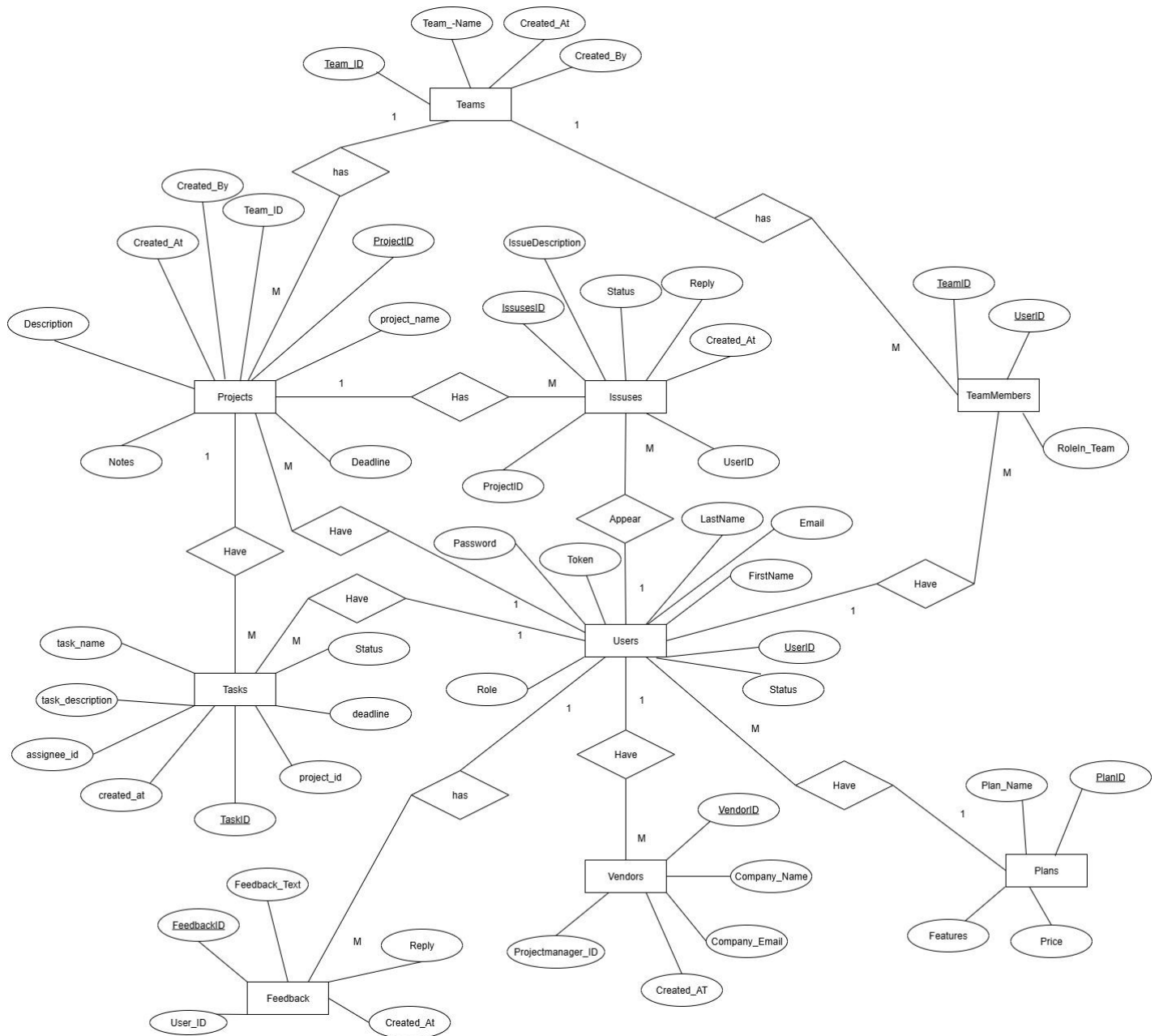2025

## ProJectra – Project Management App
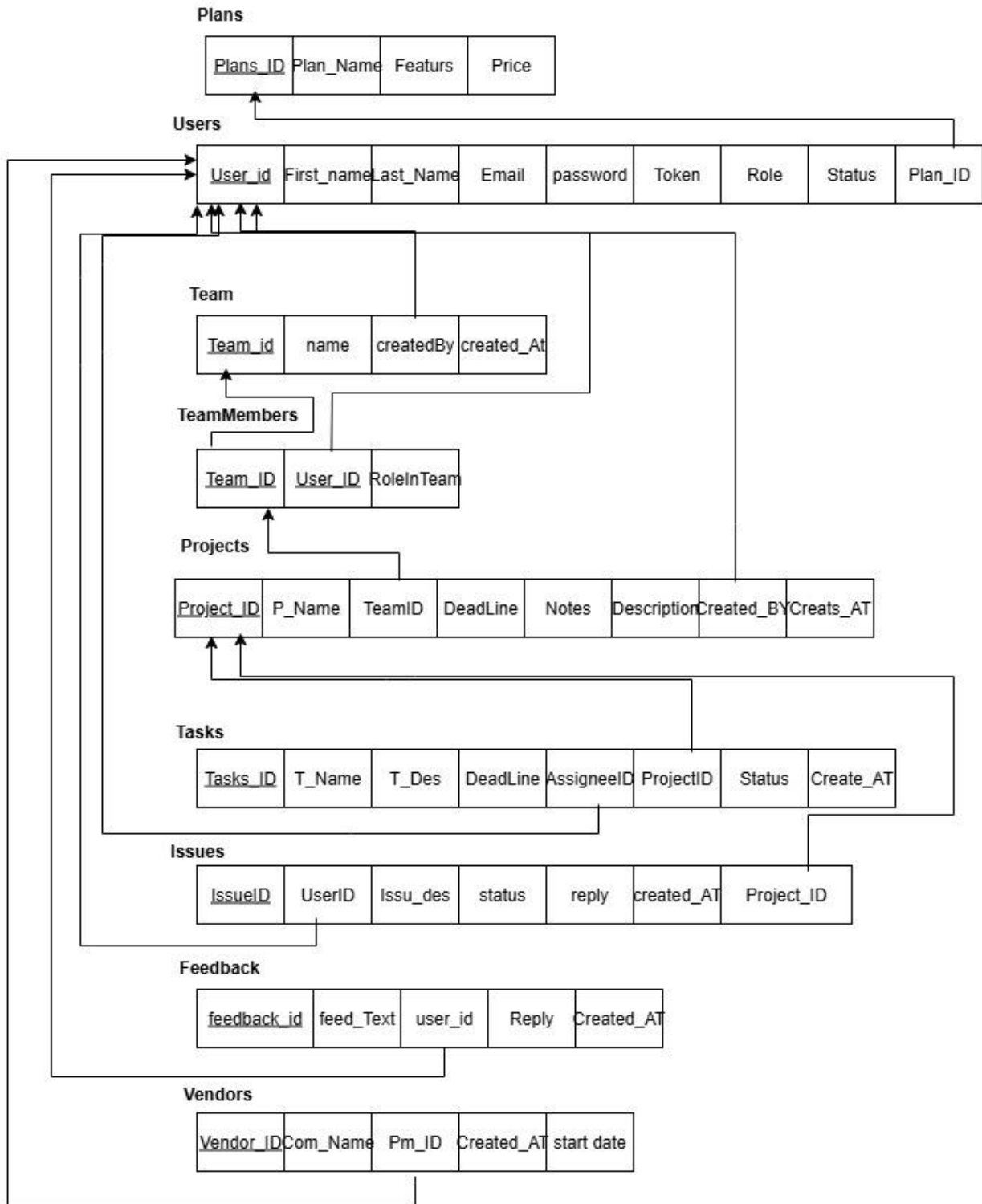
### Group: IT25_NU10

**Team members**

|   | Name with Initials | Registration Number | Contact Number | Email |
|---|---|---|---|---|
| 1 | K.Seyon | IT2375272 | 071 399 4431 | IT23752672@mysliit.lk |
| 2 | K.Braveenraj | IT23204416 | 076 661 1829 | IT23204416@my.sliit.lk |
| 3 | N.Vinushan | IT22545862 | 077 526 3630 | IT22545862@my.sliit.lk |
| 4 | P. Sinthujan | IT23856240 | 075 362 1713 | IT23856240@my.sliit.lk |
| 5 | S. Rishikeshan | IT23778344 | 074 011 0451 | IT23778344@my.sliit.lk |

# ER Diagram

## Normalized Schema

**Plans**

| Plans_ID | Plan_Name | Featurs | Price |
|----------|-----------|---------|-------|

**Users**

| User_id | First_name | Last_Name | Email | password | Token | Role | Status | Plan_ID |
|---------|------------|-----------|-------|----------|-------|------|--------|---------|

**Team**

| Team_id | name | createdBy | created_At |
|---------|------|-----------|------------|

**TeamMembers**

| Team_ID | User_ID | RoleInTeam |
|---------|---------|------------|

**Projects**

| Project_ID | P_Name | TeamID | DeadLine | Notes | Description | Created_BY | Creats_AT |
|------------|--------|--------|----------|-------|-------------|------------|-----------|

**Tasks**

| Tasks_ID | T_Name | T_Des | DeadLine | AssigneeID | ProjectID | Status | Create_AT |
|----------|--------|-------|----------|------------|-----------|--------|-----------|

**Issues**

| IssueID | UserID | Issu_des | status | reply | created_AT | Project_ID |
|---------|--------|----------|--------|-------|------------|------------|

**Feedback**

| feedback_id | feed_Text | user_id | Reply | Created_AT |
|-------------|-----------|---------|-------|------------|

**Vendors**

| Vendor_ID | Com_Name | Pm_ID | Created_AT | start date |
|-----------|----------|-------|------------|------------|

## DataBase(MongoDB)

### 1. Users Collection

db.createCollection("Users")

db.Users.createIndex({ email: 1 }, { unique: true })   // Ensure unique emails
db.Users.createIndex({ planId: 1 })                    // Index for subscriptions

Input Data:

```
{
  "_id": ObjectId("..."),
  "firstName": "Seyon",
  "lastName": "Kokulan",
  "email": "seyonoyes@gmail.com",
  "passwordHash": "hashed_pw",
  "token": "abc123",
  "role": "Project Manager",
  "status": "Active",
  "planId": ObjectId("...")
}
```

### 2. Teams Collection

db.createCollection("Teams")

db.Teams.createIndex({ createdBy: 1 })  // Who created team

Input Data:

```
{
  "_id": ObjectId("..."),
  "teamName": "Backend Team",
  "createdBy": ObjectId("..."),
  "createdAt": ISODate("2025-09-17T10:00:00Z")
}
```

### 3. TeamMembers Collection (Junction Table M:N)

db.createCollection("TeamMembers")

db.TeamMembers.createIndex({ teamId: 1, userId: 1 }, { unique: true }) // Prevent duplicates

Input Data:

```
{
```

```
"_id": ObjectId("..."),
"teamId": ObjectId("..."),
"userId": ObjectId("..."),
"roleInTeam": "Lead",
"joinedAt": ISODate("2025-09-17T11:00:00Z")
}
```

## 4. Projects Collection

db.createCollection("Projects")

db.Projects.createIndex({ teamId: 1 })
db.Projects.createIndex({ createdBy: 1 })

Input Data:

```
{
  "_id": ObjectId("..."),
  "projectName": "Mobile App Development",
  "teamId": ObjectId("..."),
  "deadline": ISODate("2025-12-31T00:00:00Z"),
  "notes": "Important project",
  "description": "Cross-platform app",
  "createdBy": ObjectId("..."),
  "createdAt": ISODate("2025-09-17T10:30:00Z")
}
```

## 5. Tasks Collection

db.createCollection("Tasks")

db.Tasks.createIndex({ projectId: 1 })
db.Tasks.createIndex({ assigneeId: 1 })

Input Data:

```
{
  "_id": ObjectId("..."),
  "taskName": "Setup CI/CD",
  "taskDescription": "Configure GitHub Actions",
  "deadline": ISODate("2025-10-01T00:00:00Z"),
  "assigneeId": ObjectId("..."),
  "projectId": ObjectId("..."),
  "status": "In Progress",
  "createdAt": ISODate("2025-09-17T11:00:00Z")
}
```

## 6. Issues Collection

db.createCollection("Issues")

db.Issues.createIndex({ projectId: 1 })
db.Issues.createIndex({ userId: 1 })

Input Data:

```
{
 "_id": ObjectId("..."),
 "projectId": ObjectId("..."),
 "userId": ObjectId("..."),
 "issueDescription": "API not responding",
 "status": "Pending",
 "reply": null,
 "createdAt": ISODate("2025-09-17T12:00:00Z")
}
```

## 7. Feedback Collection

db.createCollection("Feedback")

db.Feedback.createIndex({ userId: 1 })

Input Data:

```
{
 "_id": ObjectId("..."),
 "userId": ObjectId("..."),
 "feedbackText": "Great platform!",
 "reply": null,
 "createdAt": ISODate("2025-09-17T13:00:00Z")
}
```

## 8. Vendors Collection

db.createCollection("Vendors")

db.Vendors.createIndex({ pmId: 1 })

Input Data:

```
{
 "_id": ObjectId("..."),
```

```
  "companyName": "Tech Solutions Ltd",
  "companyEmail": "contact@techsolutions.com",
  "pmId": ObjectId("..."),
  "createdAt": ISODate("2025-09-17T14:00:00Z")
}
```

## 9. Plans Collection

db.createCollection("Plans")

db.Plans.createIndex({ planName: 1 }, { unique: true })

Input Data:

```
{
  "_id": ObjectId("..."),
  "planName": "Premium",
  "features": ["Unlimited Projects", "Priority Support"],
  "price": 99.99
}
```