Note:

1. All Keys (Primary, Foreign and Candidate) have been underlined in the diagram.
2. Foreign Keys have been mapped to Primary key using Arrows.

**EMPLOYEE**

**Primary Key:** Emp\_id

**Foreign Key:** Project\_Id, Supervisor\_Emp\_ID,Admin\_id

**Candidate Keys:** Emp\_id

**Functional Dependencies:**

Emp\_id -> {fname, lname, dob, project\_id, designation, supervisor\_emp\_id, admin\_id, emp\_ workhours, emp\_city, emp\_state}

BCNF Normalized. No changes required here.

**HR ADMIN**

**Primary Key:** Admin\_id

**Foreign Key:**  N/A

**Candidate Keys:** Admin\_id, Email

**Functional Dependencies:**

Admin\_id->{Fname,Lname,Email}

Email->{Fname,Lname,Admin\_id}

BCNF Normalized. No changes required here.

**EMPLOYEE\_SKILLS**

**Primary Key:** {Emp\_id, skills}

**Foreign Key:** Emp\_id

**Candidate Keys:** {Emp\_id, skills}

**Functional Dependencies:**

{Emp\_id, skills} ->skills

BCNF Normalized. No changes required here.

**EMPLOYEE\_TRAINING\_COMPLETES**

**Primary Key:** {Emp\_id, Training\_id}

**Foreign Key:** Emp\_id , Training\_id

**Candidate Keys:** {Emp\_id, Training\_id}

**Functional Dependencies:**

{Emp\_id, Training\_id}-> Completion\_date

BCNF Normalized. No changes required here.

**PERFORMANCE**

**Primary Key:** Emp\_id

**Foreign Key:** Emp\_id

**Candidate Keys:** Emp\_id

**Functional Dependencies:**

Emp\_id -> {Performance\_Incentive, Performance\_Ranking}

BCNF Normalized. No changes required here.

**PROJECT**

**Primary Key:** Project\_id

**Foreign Key:** Admin\_id

**Candidate Keys:** Project\_id

**Functional Dependencies:**

Project\_id -> { Project\_name, Project\_city, Project\_state, Admin\_id}

BCNF Normalized. No changes required here.

**PROJECT\_TECH\_STACK**

**Primary Key:** {Project\_id,Tech\_stack}

**Foreign Key:** Project\_id

**Candidate Keys:** {Project\_id,Tech\_stack}

**Functional Dependencies:**

{Project\_id,Tech\_stack} ->Tech\_stack

BCNF Normalized. No changes required here.

**TRAINING**

**Primary Key:** Training\_id

**Foreign Key:** Project\_id

**Candidate Keys:** Training\_id

**Functional Dependencies:**

Training\_id -> { Training\_cost , Project\_id}

BCNF Normalized. No changes required here.

**LEAVE**

**Primary Key:** Leave\_id

**Foreign Key:** Emp\_id

**Candidate Keys:** Leave\_id

**Functional Dependencies:**

Leave\_id ->

{ Type\_of\_Leave,Leave\_start\_date,Leave\_start\_day,Leave\_end\_date,Leave\_end\_day,Emp\_Id}

BCNF Normalized. No changes required here.

**PAYROLL**

**Primary Key:** Payroll\_id

**Foreign Key:**  Emp\_id, Project\_id

**Candidate Keys:** Payroll\_id

**Functional Dependencies:**

Payroll\_id ->{Project\_id, Salary, Payroll\_type, Emp\_id}

BCNF Normalized. No changes required here.

**TRAINING\_SKILLS\_ACQUIRED**

**Primary Key:** { Training\_id, Skills\_acquired}

**Foreign Key:** Training\_id

**Candidate Keys:** { Training\_id, Skills\_acquired}

**Functional Dependencies:**

{Training\_id, Skills\_acquired } -> Skills\_acquired

BCNF Normalized. No changes required here.