

SpaceX Database Management System

Conceptual Schema

24, Nov 2020;

Batch No - 09

Database Conceptual Schema

1. **Rocket** (name: **VARCHAR(20)**, type: **VARCHAR(10)**, stages: **INTEGER**, rocket_id: **VARCHAR(24)**, active: **VARCHAR(10)**, country: **VARCHAR(40)**, company : **VARCHAR(20)**, cost_per_launch: **INTEGER**);
2. **Payloads** (payload_id: **VARCHAR(24)**, name: **VARCHAR(35)**, type: **VARCHAR(20)**, reuse: **VARCHAR(10)**, manufacturer: **VARCHAR(40)**, mass_kg: **FLOAT**, mass_lb: **FLOAT**, orbit: **VARCHAR(10)**, reference_system: **VARCHAR(30)**, regime: **VARCHAR(30)**);
3. **Missions** (launch_status: **VARCHAR(10)**, launch_id: **VARCHAR(24)**, name: **VARCHAR(50)**, date: **DATETIME**);
4. **Launch Pad** (launchpad_id: **VARCHAR(24)**, name: **VARCHAR(50)**, full_name: **VARCHAR(80)**, status: **VARCHAR(20)**, locality: **VARCHAR(50)**, region: **VARCHAR(20)**, timezone: **VARCHAR(40)**, latitude: **FLOAT**, longitude: **FLOAT**);
5. **Drone Ship** (ship_id: **VARCHAR(24)**, home_port: **VARCHAR(30)**, name: **VARCHAR(35)**, type: **VARCHAR(20)**, roles: **VARCHAR(45)**, activity: **VARCHAR(10)**, mass_kg: **FLOAT**, mass_lb: **FLOAT**);
6. **Administrators** (name: **VARCHAR(25)**, admin_id: **VARCHAR(12)**, password: **VARCHAR(20)** check (LENGTH(password) > 8), access_level: **VARCHAR(10)**);

Conceptual Schema for Relations

1. **Delivers** (payload_id: VARCHAR(24), rocket_id: VARCHAR(24), name: **VARCHAR(50)**);
2. **Assigned** (date: **DATETIME**, name: **VARCHAR(50)**, rocket_id: VARCHAR(24), launch_id: VARCHAR(24));
3. **First_stage_recovery** (rocket_id: VARCHAR(24), ship_id: VARCHAR(24), roles: **VARCHAR(50)**);
4. **Updates_Data** (admin_id: VARCHAR(12), launch_id: VARCHAR(24), name: **VARCHAR(50)**, launch_status: **VARCHAR(10)**);
5. **Launches** (launchpad_id: VARCHAR(24), rocket_id: VARCHAR(24), name: **VARCHAR(50)**, status: **VARCHAR(30)**);