**Database Specifications**

The following tables outline the database structure and provide example entries within the database.

**Permit Table:** provides information about a current permit and becomes a new entry into the database when a user requests a new permit.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **UserID**  **INT** | **Vehicle Type VARCHAR(200)** | **Department**  **VARCHAR(150)** | **Permit**  **Duration** | **Permit Start (ccyy/mm/dd)** | **Permit End**  **(ccyy/mm/dd)** | **Permit number INT (PK)(FK) NOT NULL** | **Approved**  **(Approved,**  **Pending)**  **VARCHAR(200)** |
| 1 | Two Wheeler | Administration | Yearly | 2015/11/10 | 2016/11/10 | 1 | Approved |
| 2 | Four wheeler | General | Monthly | 2016/08/06 | 2016/09/06 | 2 | Pending |
| 3 | Other | Science and Engineering | Daily | 2016/02/09 | 2016/02/10 | 3 | Approved |

**Parking violation:** Provides all pertinent information for a parking violation and is entered into the database by a patrol staff

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Citation number (PK), (Int)** | **UserID**  **INT (PK)** | **Date (ccyy/mm/dd)** | **Time (24 hour time)** | **Violation**  **Description VARCHAR(250)** | **Permit**  **Number(FK), (INT)** | **Vehicle**  **License number**  **VARCHAR(250)** | **Vehicle type**  **VARCHAR(200)** |
| 1 | 1 | 2016/01/10 | 10:00 | Illegally Parked in a handicap zone | 1 | WAM-011 | Two Wheelers |
| 2 | 2 | 2016/04/12 | 12:00 | Parked without a permit | Null | BAT-089 | Four Wheelers |
| 3 | 3 | 2016/02/11 | 14:00 | Expired permit | 3 | CHR-078 | Other |

**Vehicle Type (Two Wheeler, Four Wheeler, Other)**

**Permit Duration (Yearly, Monthly, Hourly, Daily)**

**Smoking and other violations:** Provides all pertinent information for a smoking/other violations and is entered into the database by a patrol staff

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Citation Number(Int)**  **(Pk)** | **User\_ID INT (FK)** | **Violation**  **Type (Other, Smoking) VARCHAR(150)** | **Violation description**  **VARCHAR(150)** | **Department\***  **VARCHAR(150)** | **Violator supervisor**  **VARCHAR(150)** | **Date**  **(ccyy/mm/dd)** | **Time**  **(24 hour time)** | **Place in campus**  **VARCHAR(150)** |
| 1 | 1 | Other | Public Nudity | Visitor | Angelica Cloe | 2016/05/20 | 15:00 | In front of P Block |
| 2 | 2 | Smoking | Null | Business | Ben Parker | 2016/07/30 | 17:00 | O Block level 2 |
| 3 | 3 | Other | Trespassing | Science and Engineering | Thomas Wayne | 2016/05/05 | 20:10 | B Block level 5 |

\*listing department or faculty that a someone belongs to. For example, a student in the science and engineering degree would be listed under this discipline.

**Health and Safety Issue:** Report of the issue so that it can be sent to users so that they can stay away from a particular area while the issue is being resolved.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Issue number INT (PK) (Not Null)** | **Date (dd/mm/yyyy)** | **Time(24 hour time)** | **Person name VARCHAR(150)** | **Department VARCHAR(150)** | **Resolution date (ccyy/mm/dd)** | **Resolution**  **Time (In 24 hour time)** | **Resolution**  **Description VARCHAR(150)** | **\*Issue Supervisor VARCHAR(150)** | **\*Place in Campus**  **VARCHAR(150)** |
| 1 | 01/02/2016 | 10:00 | Barry Allen | Science and Engineering | 2016/02/01 | 12:00 | Chemical spill was cleaned | Iris West | W block level 2 |
| 2 | 02/03/2016 | 14:00 | Diana Prince | Business | NULL | NULL | Null | Steve Trevor | B Block level 3 |
| 3 | 03/05/2016 | 16:00 | Steven Strange | Arts | 2016/05/04 | 20:00 | Missing Student was found | Kent Nelson | A Block level 3 |

\*Added columns

**Payment fines:** Tracks the current status of the permit (paid, further processing or pending)

|  |  |
| --- | --- |
| **Citation number (Pk)(FK) Not Null Int** | **Payment status**  **VARCHAR(150)** |
| 1 | Paid |
| 2 | Further Processing |
| 3 | Pending |

**Account Details:** Holds the relevant information and login details for each particular user of the system.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Email address VARCHAR(250)** | **Name VARCHAR(250)** | **User\_Id INT NOT NULL (PK)(FK)** | **Password VARCHAR(250)** | **Account Type VARCHAR(250)** |
| Alex.Parks12@atmiya.edu.au | Alex Parks | 1 | Martha | Staff |
| Aaron.Luthor@atmiya.edu.au | Aaron Luthor | 2 | Wally2 | Student |
| George.Curious@atmiya.edu.au | George Curious | 3 | StupidShinji | Visitor |

**Additional information SQL statements**

DATE() A date value in ‘CCYY-MM-DD’ format

TIME() A time value in ‘hh:mm:ss’ format

VARCHAR() If you like you can just use VARCHAR(200) OR VARCHAR(250) if you want I just added values that could work

The INT size does not need to be specified and encompasses a range of values from -260,000 to 260,000 by default, however the size can be assigned using the INT(size) function