

## DDL commands for f16g324 DB-Schema

### 1)Table - *user*

```
CREATE TABLE `user` (  
  `UIN` int(11) NOT NULL,  
  `username` varchar(45) NOT NULL,  
  `password` varchar(45) NOT NULL,  
  `firstname` varchar(45) NOT NULL,  
  `lastname` varchar(45) NOT NULL,  
  `role` varchar(45) DEFAULT NULL,  
  PRIMARY KEY (`UIN`),  
  UNIQUE KEY `username_UNIQUE` (`username`),  
  UNIQUE KEY `UIN_UNIQUE` (`UIN`))
```

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### 2)Table – *student*

```
CREATE TABLE `student` (  
  `student_uin_fk` int(11) NOT NULL,  
  `firstname` varchar(45) NOT NULL,  
  `lastname` varchar(45) NOT NULL,  
  `username_fk` varchar(45) NOT NULL,  
  `lastaccessedon` varchar(45) DEFAULT NULL,  
  `testscore_json` varchar(2000) DEFAULT NULL,  
  UNIQUE KEY `student_uin_fk_UNIQUE` (`student_uin_fk`),  
  KEY `username_idx` (`username_fk`),  
  KEY `student_id_idx` (`student_uin_fk`,`username_fk`),  
  CONSTRAINT `student_id` FOREIGN KEY (`student_uin_fk`) REFERENCES `user` (`UIN`),  
  CONSTRAINT `username_fk` FOREIGN KEY (`username_fk`) REFERENCES `user` (`username`))
```

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### 3)Table - *course*

```
CREATE TABLE `course` (  
  `crn` int(11) NOT NULL,  
  `coursecode` int(11) NOT NULL,  
  `coursename` varchar(45) NOT NULL,  
  `coursedescription` varchar(500) DEFAULT NULL,  
  PRIMARY KEY (`crn`),  
  UNIQUE KEY `crn_UNIQUE` (`crn`))
```

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#### 4)Table - *test*

```
CREATE TABLE `test` (  
  `testnumber` int(11) NOT NULL,  
  `crn` int(11) NOT NULL,  
  `coursecode` int(11) NOT NULL,  
  `startdate` date NOT NULL,  
  `enddate` date NOT NULL,  
  PRIMARY KEY (`testnumber`),  
  UNIQUE KEY `testnumber_UNIQUE` (`testnumber`),  
  KEY `crn_idx` (`crn`),  
  CONSTRAINT `crn` FOREIGN KEY (`crn`) REFERENCES `course` (`crn`))
```

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#### 5)Table - *question*

```
CREATE TABLE `question` (  
  `id` int(11) NOT NULL AUTO_INCREMENT,  
  `testid` int(11) NOT NULL,  
  `questiontype` varchar(15) DEFAULT NULL,  
  `questiontext` varchar(1000) NOT NULL,  
  `correctanswer` varchar(100) NOT NULL,  
  `tolerance` double DEFAULT NULL,  
  PRIMARY KEY (`id`),  
  UNIQUE KEY `questiontext_UNIQUE` (`questiontext`),  
  KEY `testid_idx` (`testid`),  
  CONSTRAINT `testid` FOREIGN KEY (`testid`) REFERENCES `test` (`testnumber`))
```

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