

```
Users(  
    id INTEGER PRIMARY KEY NOT NULL,  
    first_name STRING,  
    last_name STRING,  
    username STRING NOT NULL,  
    password STRING NOT NULL,  
    email STRING NOT NULL,  
    skype_address STRING,  
    created DATETIME NOT NULL  
)
```

```
Languages(  
    id INTEGER NOT NULL REFERENCES Users(id),  
    language STRING NOT NULL  
)
```

```
Students(  
    id INTEGER NOT NULL REFERENCES Users(id),  
    grade_level INTEGER  
)
```

```
Teachers(  
    id INTEGER NOT NULL REFERENCES Users(id)  
)
```

```
TeacherAvailability(  
    id INTEGER NOT NULL REFERENCES Teachers(id),  
    date DATETIME NOT NULL  
)
```

```
Worksheets(  
    id INTEGER PRIMARY KEY NOT NULL,  
    creator_id INTEGER NOT NULL REFERENCES Users(id),  
    grade_level INTEGER,  
    category_id INTEGER NOT NULL REFERENCES Category(id),  
    content STRING NOT NULL,  
    created DATETIME NOT NULL  
)
```

```
Category(  
  id INTEGER PRIMARY KEY NOT NULL,  
  name STRING NOT NULL,  
  created DATETIME NOT NULL  
)
```

```
Submitted(  
  id INTEGER PRIMARY KEY NOT NULL,  
  worksheet_id INTEGER NOT NULL REFERENCES Worksheets(id),  
  student_id INTEGER NOT NULL REFERENCES Students(id),  
  content STRING NOT NULL  
)
```

```
SubmissionModifyDate(  
  id INTEGER NOT NULL REFERENCES Submitted(id),  
  modified DATETIME NOT NULL  
)
```

```
Returned(  
  id INTEGER NOT NULL REFERENCES Submitted(id)  
  teacher_id INTEGER NOT NULL REFERENCES Users(id),  
  feedback STRING NOT NULL,  
  grade INTEGER NOT NULL  
)
```

Some notes:

- The `password` attribute in the `Users` schema is salted and hashed
- The `grade_level` attribute is an integer from 0-13, with each number corresponding to a grade level (0 represents Kindergarten or equivalent, 1-12 represent grades 1-12 or equivalent, 13 represents any post secondary level).
- The `content` and `feedback` attributes in the `Worksheets`, `Submitted`, `Returned` schemas are links to a CDN hosting the content as a PDF.

Example queries:

```
SELECT * FROM Students WHERE grade_level = 9;
```

```
SELECT * FROM Worksheets JOIN Category ON Worksheets.category_id =
```

```
category.id WHERE category.name = 'calculus';
```

```
SELECT student_id FROM (SELECT student_id, AVG(grade) as avg FROM Returned  
JOIN Submitted on Returned.id = Submitted.id GROUP BY student_id) WHERE avg  
> 50;
```