DuckDash - Database Proposal

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Users:

The Users collection will hold all data relevant to the user. It will hold basic information like their username, password, email address, bio, and password. It will also hold a list of friends and a list of test results completed by them.

```
{
  "userId": "653ee75f543aa9a11d4c247c",
  "username": "epicuser123",
  "email": "imanemail@email.com",
  "password": "hashedPasswordHere",
  "profilePic": "/public/coolpic.jpg",
  "bio": "man this bio is awesome",
  "friends": ["353ee75f543aa9a11d4c280b"],
  "testScores": ["653ee75f543aa9a11d4c280b", "653ee75f543aa9a11d4c2481"]
}
```

Name	Type	Description
userId	string	Unique identifier given to represent a specific user.
username	string	Inputted username of the user.
email	string	Inputted email of the user.
password	string	A hash of the user's created password.
profilePic	string	File location of the user's uploaded profile picture
bio	string	Inputted bio of the user.
friends	array	Array of userIds that the user has accepted as a friend.
testScores	array	Array of resultId's that were completed by the user.

Results:

The Results collection will hold all data that is stored after completing one of the tests. It will have the type of the test that was taken, the ID of that test if it was preset, the users WPM, the users accuracy, and the date and time that the test was taken.

```json
{
  "resultId": "653ee75f543aa9a11d4c247c",
  "testType": "Preset",
  "testId": "653ee75f543aa9a11d4c280b",
  "userId": "653ee75f543aa9a11d4c247c",
  "wpm": 100,
  "accuracy": 97,
  "dateTaken": "11/11/2023",
  "timeTaken": "2:31 PM"
}
```

Name	Type	Description
resultId	string	Unique identifier given to represent a stored test result.
testType	string	Type of test that was taken. (Preset or Random)
testId	string	The identifier of the preset test that was taken. If the testType was random, this will be null.
userId	string	The userId of the user that took the test.
wpm	number	The calculated WPM of this result.
accuracy	number	The calculated accuracy of this result.
dateTaken	string	The data that this test was taken.
timeTaken	string	The time that this test was taken.

Preset Tests:

The Preset Tests collection will hold all data that is being held for each of the premade typing tests. It will hold information like the title, the actual text to be written, the difficulty of the test, and the scores that users have received on this test.

```
{
  "testId": "653ee75f543aa9a11d4c280b",
  "testTitle": "Honor Pledge",
  "text": "I pledge my honor that I have abided by the Stevens Honor System.",
  "difficulty": "Easy",
  "testScores": ["653ee75f543aa9a11d4c280b", "653ee75f543aa9a11d4c2481"]
}
```

Name	Type	Description
testId	string	Unique identifier given to represent the test.
testTitle	string	Title of the preset test.
text	string	The text to be that will have to be typed.
difficulty	string	The difficulty of the test. (Easy, Medium, or Hard)
testScores	array	An array of resultId's that took this specific test.

Requests:

The Requests collection will hold all of the data from requesting to be friends with another user.

```
{
  "requestId": "653ee75f543aa9a11d4c280b",
  "senderId": "653ee75f543aa9a11d4c247c",
  "receiverId": "653ee75f543aa9a11d4c280b",
  "status": "Pending",
  "dateSent": "10/31/2023",
  "timeSent": "10:33 PM"
}
```

Name	Type	Description
requestId	string	Unique identifier given to represent the friend request.
senderId	string	The userId of the user who sent the friend request.
receiverId	string	The userId of the user who received the friend request.

| dateSent | string | The date that the friend request was sent. |
| timeSent | string | The time that the friend request was sent. |