**StudyGeeks Application**

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**Tutors**

The tutors collection will store all details about the tutor. Tutors will be able to login, update their details, see their students, and chat with them (chat is accessed via student collection). Also useful for identifying search parameters like subjects, rating, price, proficiency, and location.

{

“\_id” : “7b7997a2-c0d2-4f8c-b27a-6a1d4b5b6310”,

“email” : “[john.doe@gmail.com](mailto:john.doe@gmail.com)”,

“firstName” : “John”,

“lastName” : “Doe”,

“hashedPassword” : “$2a$08$XdvNkfdNIL8F8xsuIUeSbNOFgK0M0iV5HOskfVn7.PWncShU.O”,

“town” : “Hoboken”,

“state” : “New Jersey”,

“reviews”: [“7b696a2-d0f2-4g8g-h67d-7a1d4b6b6710”,

“5e6bccc5-d0f2-4g8g-h67d-7b696a2”],

“avgRating” : 4.2,

“tutorSubjects” : [

{“\_id” : “8k2481a2-c0d2-4f8c-b27a-6a1d4b5b6310”,

“subjectName” : “physics”,

“proficiency” : “intermediate”,

“price” : 20.00,

“teaches” : [“7b696a2-d0f2-4g8g-h67d-szrV2ETTR5”] },

{“subjectName” : “web programming”,

“proficiency” : “advanced”,

“price” : 15.00,

“teaches” : [“7b696a2-d0f2-4g8g-h67d-7a1d7b696a5”,

“NZICSp9-alEQ-HxI1-mylT-szrV2ETTR5”]

}

],

“availability” : [

{day: “Monday”,

start: 14,

end: 16},

{day: “Wednesday”,

start: 12,

end: 17}

]

}

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| \_id | string | A unique, randomly-generated value to represent the tutor. |
| email | string | A string representing the tutor’s email address |
| firstName | string | The tutor’s first name |
| lastName | string | The tutor’s last name |
| hashedPassword | string | The password used when the tutor logs in |
| town | string | The town where the tutor works |
| state | string | The state where the tutor works |
| reviews | array | Array that stores IDs of reviews tutors receive |
| avgRating | number | The tutor’s average rating. When a new rating is made for the tutor, this is recalculated |
| tutorSubjects | Sub-Document | A sub document that contains the subjects they tutor, their proficiency in the subject, their desired pay, and the IDs of students they tutor |
| availability | Sub-Document | Sub document that stores the available times of the tutor through the week |

**Students**

The students collection will store all students credentials. Students will be able to login, search for tutors, request to be tutored in a subject, (text) chat with a tutor (via tutoredBy’s ID linking to tutorPairs), and post reviews/ratings of tutors they have had.

{

“\_id” : “7b7997a2-c0d2-4f8c-b27a-6a1d4b5b6320”,

“email” : “brian.molko@gmail.com”,

“firstname”:”Brian”,

“lastname”: “Molko”,

“hashedPassword” : “$2a$24$XdvNkfdNI08F8xsuIUeSbNOFgK0M0iV5HOskfVn7.Plm23mj#S”,

“town”: “Brooklyn”,

“state”: “New York”,

“studentSubjects” : [

{“\_id” : “8k2481a2-c0d2-4f8c-b27a-6a1d4b5b6310”,

“subjectName” : “web programming”,

“proficiency ”: “advanced”,

“tutoredBy”: “NZICSp9alEQHxI1mylTszrV2ETTR5”}],

“availability” : [

{day: “Monday”,

start: 8,

end: 12},

{day: “Wednesday”,

start: 12,

end: 17}

]

}

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| \_id | string | A unique, randomly-generated value to represent the student. |
| email | string | A string representing the student’s email address |
| firstName | string | The student’s first name |
| lastName | string | The student’s last name |
| hashedPassword | string | The password used when the student logs in |
| town | string | The town where the student studies |
| state | string | The state where the student studies |
| studentSubjects | Sub document | The name of the subject that the student is willing to take up with the proficiency level and the id of a student-tutor pair |
| availability | Sub document | The available timings of the student through the week |

**Reviews**

The reviews collection will store all reviews.

{

“\_id” : “7b7997a2-c0d2-4f8c-b27a-6a1d4b5b6444”,

“reviewer” : “7b7997a2-c0d2-4f8c-b27a-6a1d4b5b6320”,

“reviewee”: “7b7997a2-c0d2-4f8c-b27a-6a1d4b5b6310”,

“reviewContents”: “John is a great teacher, he is energetic and goes into details of every bit of code he is writing.”,

“rating”: 4.2

}

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| \_id | string | A unique, randomly-generated value to represent the student. |
| reviewer | string | The id of the student who reviews the tutor |
| reviewee | string | The id of the tutor who is being reviewed by the student |
| reviewContents | string | A review of the tutor written by the student. |
| rating | number | The rating of the tutor from a range of 0-5 |

**TutorPairs**

The tutorPairs collection will store all pairs of students and tutors. This table will be referenced to show which students a tutor is matched with, and vice versa.

{

“\_id” : “NZICSp9alEQHxI1mylTszrV2ETTR5”,

“tutor\_id” : “7b7997a2-c0d2-4f8c-b27a-6a1d4b5b6310”,

“tutorFirstName” : “John”,

“tutorLastName” : “Doe”,

“student\_id” : “7b7997a2-c0d2-4f8c-b27a-6a1d4b5b6320”,

“studentFirstName” : “Brian”,

“studentLastName” : “Molko”,

“subject” : “physics”,

“chatHistoryID”: [“4wkX-lpsO-wlQNm-3JXGH-dwG7fj5Wf2”]

}

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| \_id | string | A unique, randomly-generated value to represent the tutor-student pair. |
| tutor\_id | string | The id of the tutor |
| tutorFirstName | string | The tutor’s first name |
| tutorLastName | string | The tutor’s last name |
| student\_id | string | The id of the student |
| studentFirstName | string | The student’s first name |
| studentLastName | string | The student’s last name |
| subject | string | The subject they are working with |
| chatHistoryID | array | An array of the pair’s chat history comment IDs |

**chatHistory**

Each chatHistory object will store chat info for one comment between a tutor pair. Combined, all the objects in this array form a comprehensive chat history.

{

“\_id” : “4wkX-lpsO-wlQNm-3JXGH-dwG7fj5Wf2”,

“senderId”: “7b7997a2-c0d2-4f8c-b27a-6a1d4b5b6310”,

“senderFirstName” : “John”,

“senderLastName” : “Doe”,

“receiverId”: “7b7997a2-c0d2-4f8c-b27a-6a1d4b5b6320”,

“receiverFirstName”: “Brian”,

“receiverLastName” : “Molko”,

“content” : “Can we start 15 minutes earlier tomorrow?”,

“date”: “2020-03-25T12:00:00-06:30”

}

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| \_id | string | A unique, randomly-generated value to represent the comment. |
| senderId | string | The id of the sender |
| senderFirstName | string | The first name of the sender |
| senderLastName | string | The last name of the sender |
| receiverId | string | The id of the receiver |
| receiverFirstName | string | The first name of the receiver |
| receiverLastName | string | The last name of the receiver |
| content | string | The text contents of the chat message |
| date | date | The date & time when chat comment was made (Date object) |

**tutorSubjects**

tutorSubjects is a subdocument of Tutors that stores information about the subjects taught by the tutor.

“tutorSubjects”: [{

“\_id” : “8k2481a2-c0d2-4f8c-b27a-6a1d4b5b6310”,

“subjectName” : “physics”,

“proficiency” : “intermediate”,

“price” : 20.00,

“teaches” : [“7b696a2-d0f2-4g8g-h67d-szrV2ETTR5”]

}]

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| \_id | string | the ID of the subject they tutor |
| subjectName | string | the subject they tutor |
| proficiency | string | their proficiency (credential) in the subject |
| price | number | their desired pay |
| teaches | array | An array of the IDs of students they tutor in the subject |

**studentSubjects**

studentSubjects is a subdocument of Students that stores information about the subjects that the students want/get help with.

“studentSubjects”: [{

“\_id” : “8k2481a2-c0d2-4f8c-b27a-6a1d4b5b6310”,

“subjectName” : “web programming”,

“proficiency ”: “advanced”,

“tutoredBy”: “NZICSp9alEQHxI1mylTszrV2ETTR5”

}]

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| \_id | string | the ID of the subject they are tutored in |
| subjectName | string | the subjects they are tutored in |
| proficiency | string | their proficiency in the subject (course level) |
| tutoredBy | string | The ID of the TutorPair |

**Availability**

Availability is a subdocument of both Tutors and Students, used to express the days and times that they are available to work.

“availability”: [{

“day”: “Monday”,

“start”: 8,

“end”: 12

}]

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| day | string | The day of the week they are available |
| start | number | Time of day they become available (military time) |
| end | number | Time of day they become unavailable (military time) |