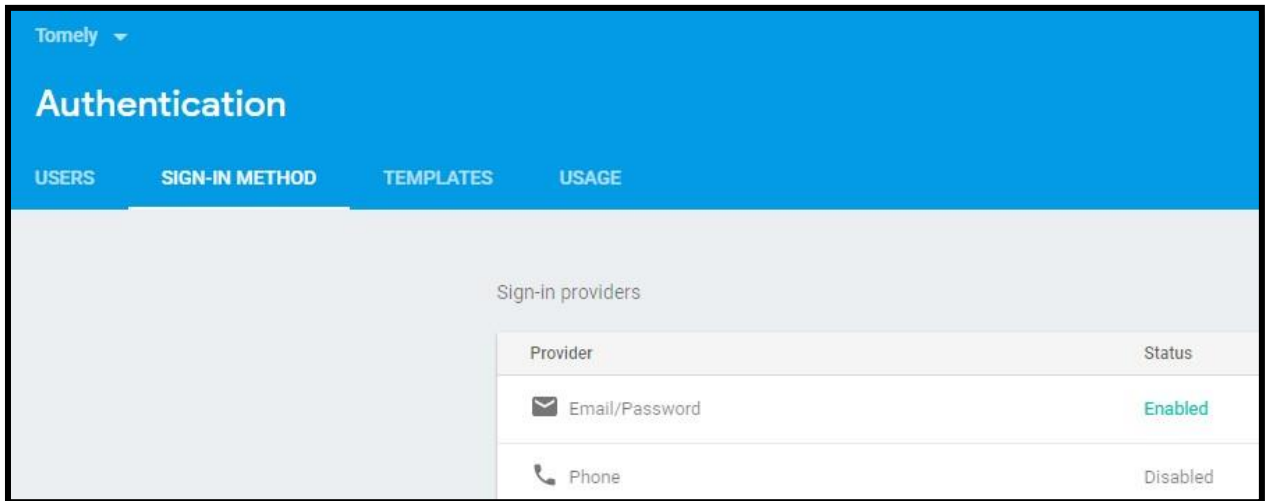# Tomely Database Details

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FBLA 2017 -2018 Mobile Application Development (NLC Submission)
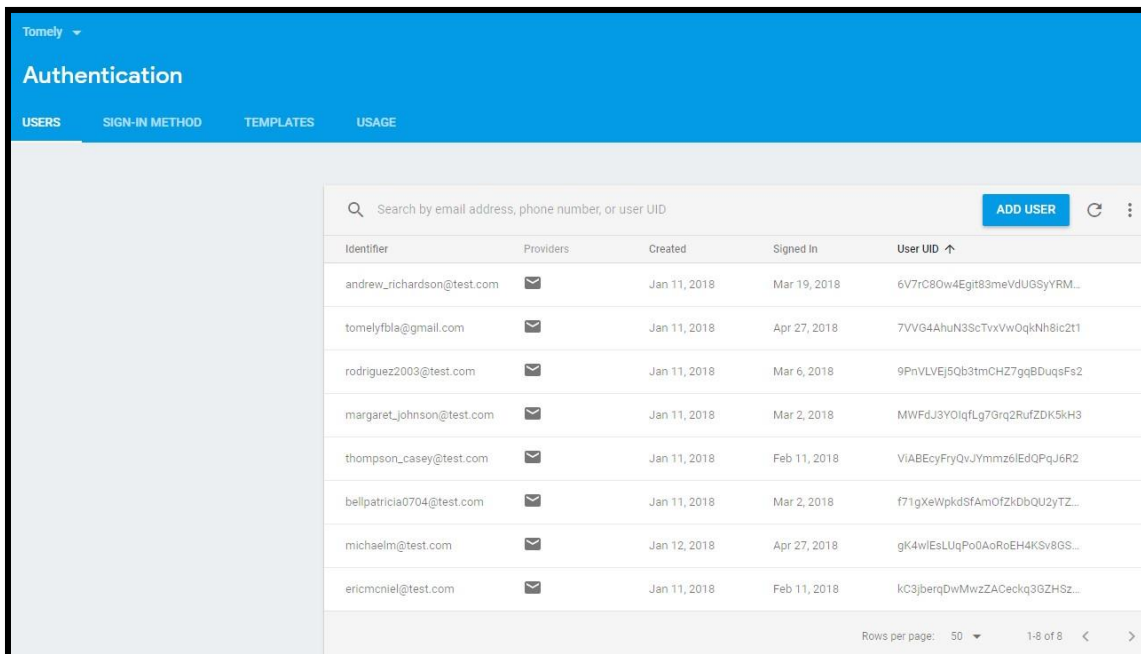
Tomely Database Details

Tomely is using Google's firebase database for storing its application data. We have chosen this database because it is a **Realtime** database and is very well supported with React-Native.
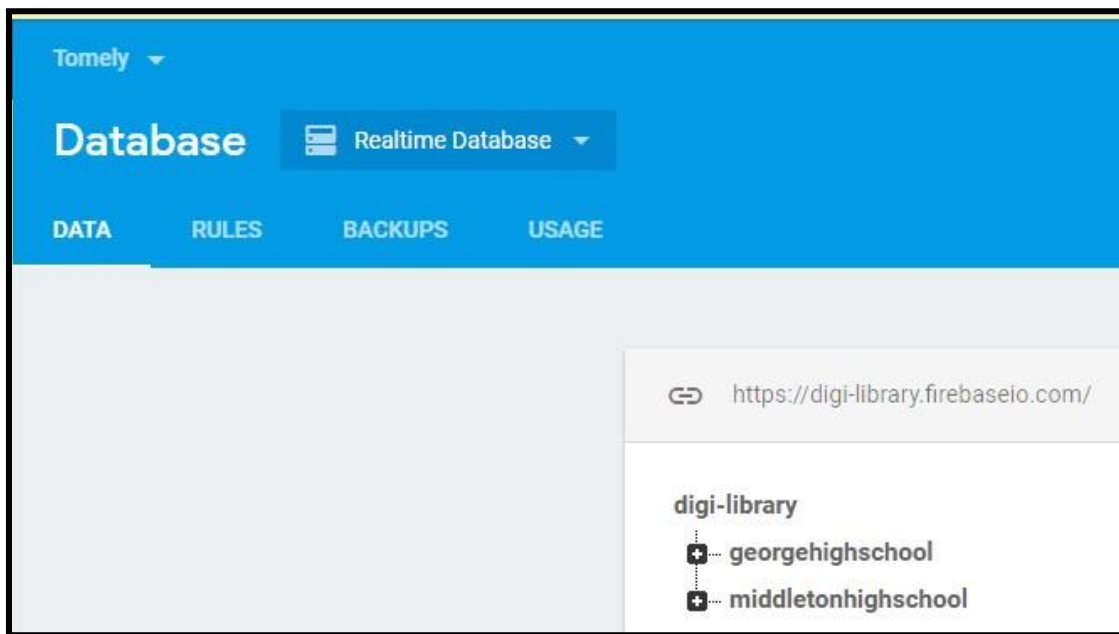
For user authentication, Tomely uses the Google Firebase's Email/Password sign-in method.

Below are the pre-existing users created for the Tomely app:

The database is stored with high-school at the top level. The default school for the app is **middletonhighschool**. This structure allows Tomely to support and integrate to other high schools easily. Below is a screenshot of the Tomely database structure:

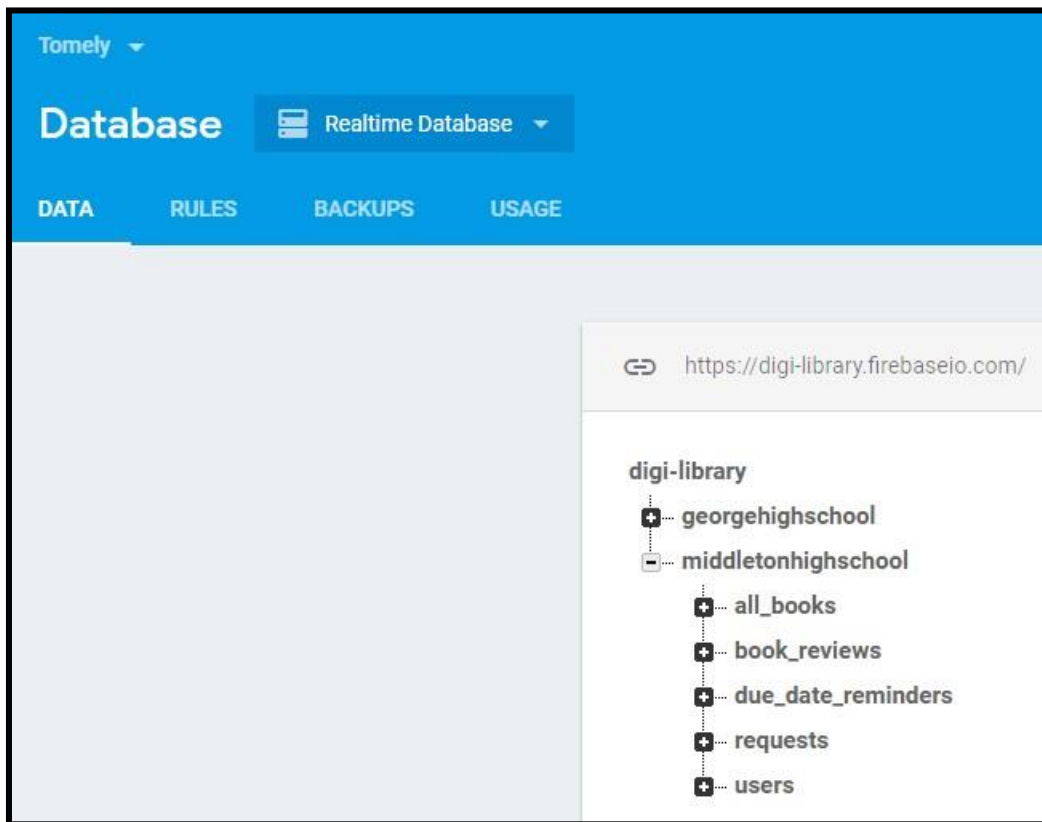Within each high school, Tomely has 5 tables.

Table Name	Description
all_books	Table to store the library books

book_reviews	Stores the user review data
requests	Stores all the data submitted by users when contacting the Tomely admin team using the "Contact Us" feature
users	Stores all the profile data and books activity per user
due_date_reminders	Stores date and time when email reminder for books due by Students/Teachers was last sent.

When a user registers with Tomely, the user profile data is stored under users.profile table as shown below:

```
⊟ users
   ⊟ 6V7rC8Ow4Egit83meVdUGSyYRMz1
      ⊞ books
      ⊟ profile
            birth_date: "03/22/1971
            created: "01/11/2018
            created_by: "ADMIN'
            email: "andrew_richardson@test.cc
            first_name: "Andrew'
            gender: "MALE'
            grade_level: "--"
            id_number: "7766832
            image_url: "https://images.pexels.com/photos/428331/pexels-
            last_name: "Richardson
            member_type: "TEACHER
            phone: "813-999-8989
            school: "Middleton
            updated: "01/11/2018
            updated_by: "ADMIN'
            user_id: "6V7rC8Ow4Egit83meVdUGSyYRMz
```

When a user checks out or reserves a book, the data is populated for the logged in user under users.books as shown below:

```
users
  6V7rC8Ow4Egit83meVdUGSyYRMz1
    books
      -L0I9I5JzgpLW1h4cs9p
        author: "Harper Lee
        image_url: "https://media1.britannica.com/eb-media/21/18202
        isbn: "9780446310789
        last_activity_date: "02/11/2018
        status: "RESERVED
        title: "To Kill a Mockingbir
      -L0IAOtkUftXagkH4fbW
```

When a book is added to the Tomely database, it is stored in the all_books table as shown below

*Note: The preview_url field is populated by extracting the URL from the <Embed> tag shown

middletonhighschool
    all_books
        -DALR_ZIjEcajAwKtpxq
        -HMIAGEcS-IUTpE-4ffX
            age_range: "14+"
            author: "Herman Melville
            condition: "NEW"
            created: "04/17/2018
            created_by: "ADMIN'
            edition: "HARDCOVER
            genre: "ADVENTURE FICTIOI
            image_url: "https://images-na.ssl-images-amazon.com/images/
            isbn: 978159308018
            isle: "B2"
            new_arrival: false
            preview_url: "https://read.amazon.ca/kp/embed?asin=B01NBLGUYE
            status: "AVAILABLE
            summary: "First published as Moby-Dick; or, The Whale in
            title: "Moby Dick
            updated: "04/17/2018
            updated_by: "ADMIN'

When a review for the book is added to the Tomely database, it is stored in the book_reviews table as shown below:

book_reviews
    -L4c-NE2OoTsTO3jKsx8
    -L4c-NY2OoTsT99jKsx8
    -L4c-NY2OoTsTO3jKsx8
        book_id: "-L0IAbfWv4F8_S2l_OL
        last_activity_date: "02/09/2018
        review_comments: "Do I even have to say how great of a book this
        user_id: "6V7rC8Ow4Egit83meVdUGSyYRM;
        user_name: "Andrew Richardsor
        user_rating: 5
    -L4c-NY2OoTsTO3jKza8
        book_id: "-L0I9l5JzgpLW1h4cs9|
        last_activity_date: "02/08/2018
        review_comments: "I was assigned to read this book in my English
        user_id: "f71gXeWpkdSfAmOfZkDbQU2yTZ;
        user_name: "Patricia Bell
        user_rating: 4

When a user submits a request via the "Contact Us" feature of Tomely, it is stored in the requests table as shown below:

```
requests   +   ×
    -L2YF1-3VB3Dgyb6TbN-
        created: "01/11/2018
        email: "michealm@test.cor
        message: "I need to extend the due date of my recently cr
        name: "Micheal McNie]
        status: "COMPLETED
        updated: "02/11/2018
    -L2chg0wNaMU0VMKEl2l
        created: "01/11/2018
        email: "margaret_johnson@test.cc
        message: "Next month, my English class will start learnir
        name: "Margaret Johnsor
        status: "COMPLETED
        updated: "02/11/2018
    -L56yK3El22c09LUaQG4
```