TECHNICAL CONSIDERATIONS

'Glow Up' Web Application

SUHAS JOSHI, IVANA NG, JESSE TAGGERT, KESONE PHIMMASONE, AND JANE YANG

This document describes some of the technical considerations involved in building Glow Up, the youth-centered foster care transition app.

PRIVACY

We propose that in the pilot version of Glow Up, any data entered by youth be visible to any caseworker and supportive adult with visibility into the youth's account.

A consideration for future versions would be the ability for youth to enter sensitive information and choose whether or not it should be shared with others who have visibility into the account.

As an application that collects data from minors, Glow Up should include an accessible privacy statement so that the youth understand how their data will be used. For example, the pilot version's privacy statement could read:

> Hi there.
>
> We're so excited you're using Glow Up to set yourself up for success! Here's what you should know from a privacy perspective:
>
> The information you put into Glow Up – contact information, goals, steps to achieve them, notes, etc. – are visible to you, your caseworker, and any supportive adults you want to be part of your journey. That's so you all can work together to track your progress and achieve your goals!
>
> As you browse resources in Glow Up and navigate the application in general, OKDHS is tracking anonymized information about page visits and click flows. We use this information to improve the app design and know which resources are most used.

You can always export your data into a file you can take with you if you ever want to stop using Glow Up.

You can get the full list of the cloud-based services Glow Up is built on that process and/or store the data you put into Glow Up. Each of these tools have solid security and do not sell your data. Needless to say, nor do we!
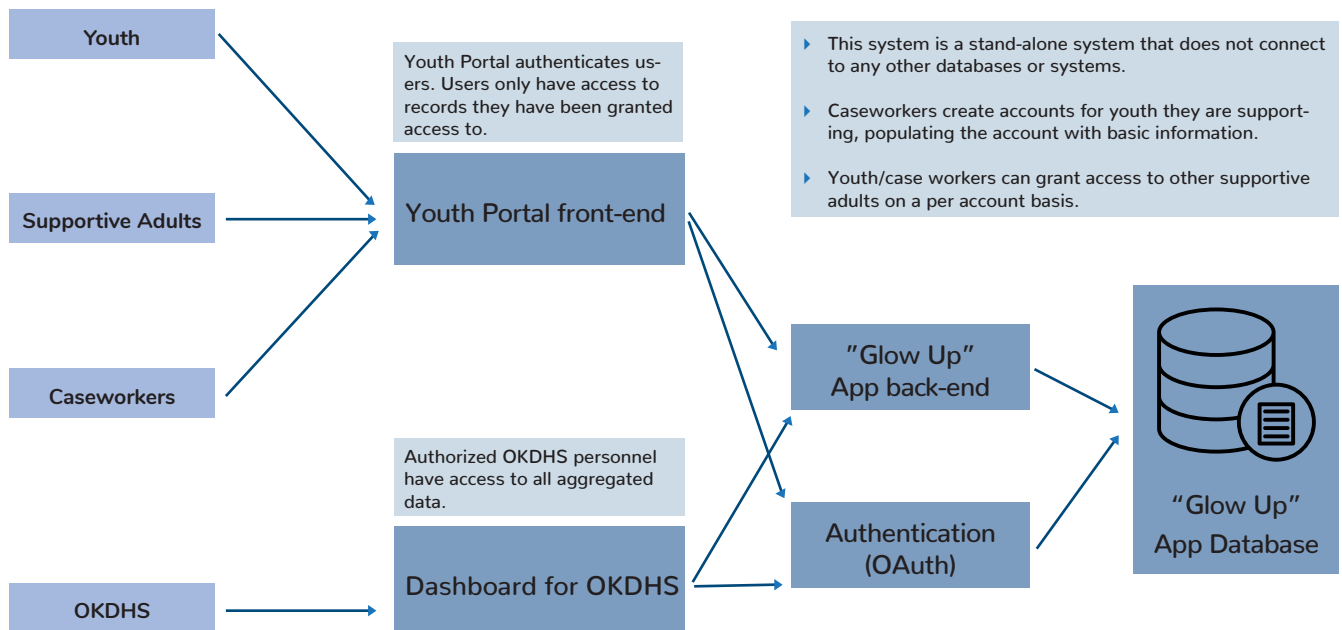
That's it. If you have any questions about how your data in Glow Up is managed, please reach out to [Person] at [first.last]@okdhs.org.

SYSTEM ARCHITECTURE

The following diagram describes a proposed system architecture for the Glow Up app. We propose exposing 2 separate user interfaces:

1) A mobile-friendly web app that provides the interface used by youth, supportive adults, and case-workers.

2) A web-based back office interface that provides the interface used by OKDHS staff and administrators.

Both interfaces would use OAuth authentication to connect to the back end.

Youth

Supportive Adults

Caseworkers

OKDHS

Youth Portal authenticates users. Users only have access to records they have been granted access to.

Youth Portal front-end

Authorized OKDHS personnel have access to all aggregated data.

Dashboard for OKDHS

▸ This system is a stand-alone system that does not connect to any other databases or systems.

▸ Caseworkers create accounts for youth they are supporting, populating the account with basic information.

▸ Youth/case workers can grant access to other supportive adults on a per account basis.

"Glow Up" App back-end

Authentication (OAuth)

"Glow Up" App Database

SCALABILITY

Given our relatively small audience size (~750 youth per year), scalability is not a major consideration for this web app. 2 server instances and 1 database instance should more than suffice for the foreseeable needs of the system.

SECURITY

Account Types

We propose the creation of 5 types of accounts, providing differentiated access and privileges to the 5 types of users who would interact with the system:

- **System Administrator:** System administrators are responsible for managing the software, servers, networking, and security of the Glow Up app. The system administrator accounts would have the following features:
  - Overall system access and responsibility; and
  - Account management for OKDHS staff (including privileges to create/terminate accounts).

- **OKDHS Staff:** OKDHS staff manage and oversee the program, including onboarding and off-boarding caseworkers, and analyzing and reporting on program success metrics. OKDHS staff accounts would have the following features:
  - Access to overall and per-caseworker dashboards;
  - Account management for caseworkers (create/terminate accounts); and
  - The ability to give caseworkers access to youth accounts (e.g., if more than one is supporting a youth or there is a change in caseworker).

- **Foster Care Caseworkers:** Foster care caseworkers work directly with the youth who use the application. They are responsible for creating youth accounts and providing other adults access to view data on youth accounts. Foster care caseworkers would have the following features:
  - View overview dashboards about all the youth they support;
  - View contact information, goals, and progress toward goals for the youth they support; and

- ▸ Account management for youth they support (create/terminate account, grant access to supportive adults).

- ▸ **Youth:** Youth accounts are for the use of the foster youth who make up the primary audience of the application. Youth accounts would have the following features:

  - ▸ Access limited to viewing/modifying all data about themselves; and

  - ▸ The ability to ask caseworkers to grant access to other supportive adults.

- ▸ **Supportive Adults:** Supportive adult accounts are intended for non-OKDHS adults who can be granted access to view data about specific youth whom they support. Supportive adult accounts would have the following feature:

  - ▸ View data about youth accounts they have access to.

Youth Account Life Cycle

In light of the privacy concerns associated with data collection involving vulnerable minors, we propose that youth accounts be created and managed by caseworkers, who would notify the youth via a mobile phone number or email address that the account was created. The youth can then set up and secure their new account. Caseworkers and youth have the ability to add or remove goals, and to update the status of actions as needed.

Caseworkers can also grant certain supportive adults (e.g., foster parents) access to youth accounts on a case-by-case basis. Supportive adults have the ability to view nonprivate data about the youth's goals and progress.

Caseworkers or OKDHS staff can give other caseworkers access to youth accounts as needed (for example, if more than one caseworker is supporting a youth or if the youth gets a new caseworker).