

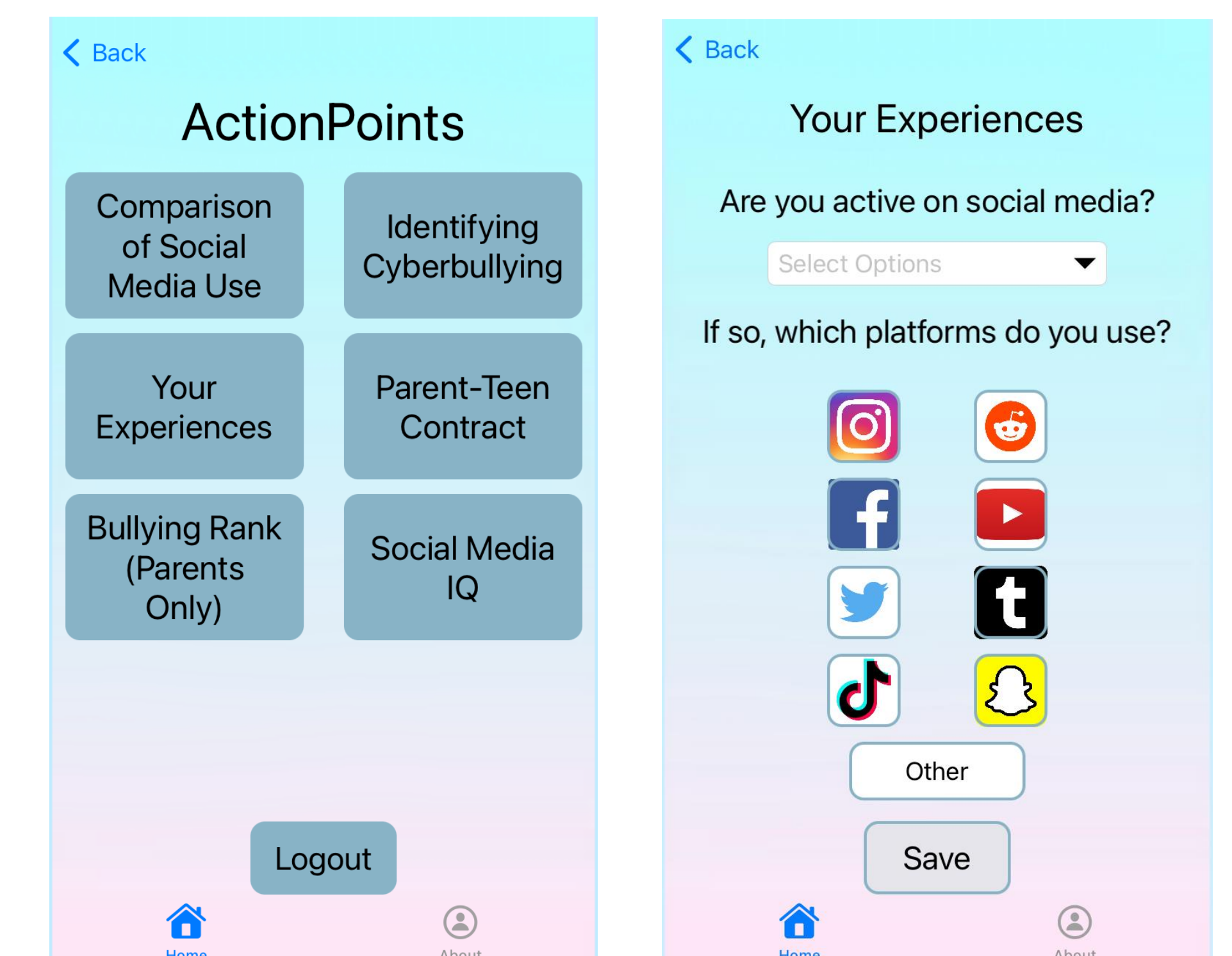
Abstract

Cyberbullying is the use of online communication to threaten, intimidate, or send hurtful messages to someone. The ActionPoint app is designed to assess the risk of cyberbullying and set healthy boundaries for social media use. Parents and teens complete ActionPoints, a series of interaction-based app modules where they engage in evidence-based activities that help them get a better understanding of cyberbullying risks and healthy online behaviors. For instance, a module in the app assesses the parent and child's knowledge of cyberbullying independently, then it compares the two to highlight differences and spark discussion with the aim of reducing cyberbullying. This model is one way that the instances of cyberbullying can be reduced by targeting the bystander effect and encouraging a stronger relationship between parent and child about cyberbullying

Design and Architecture

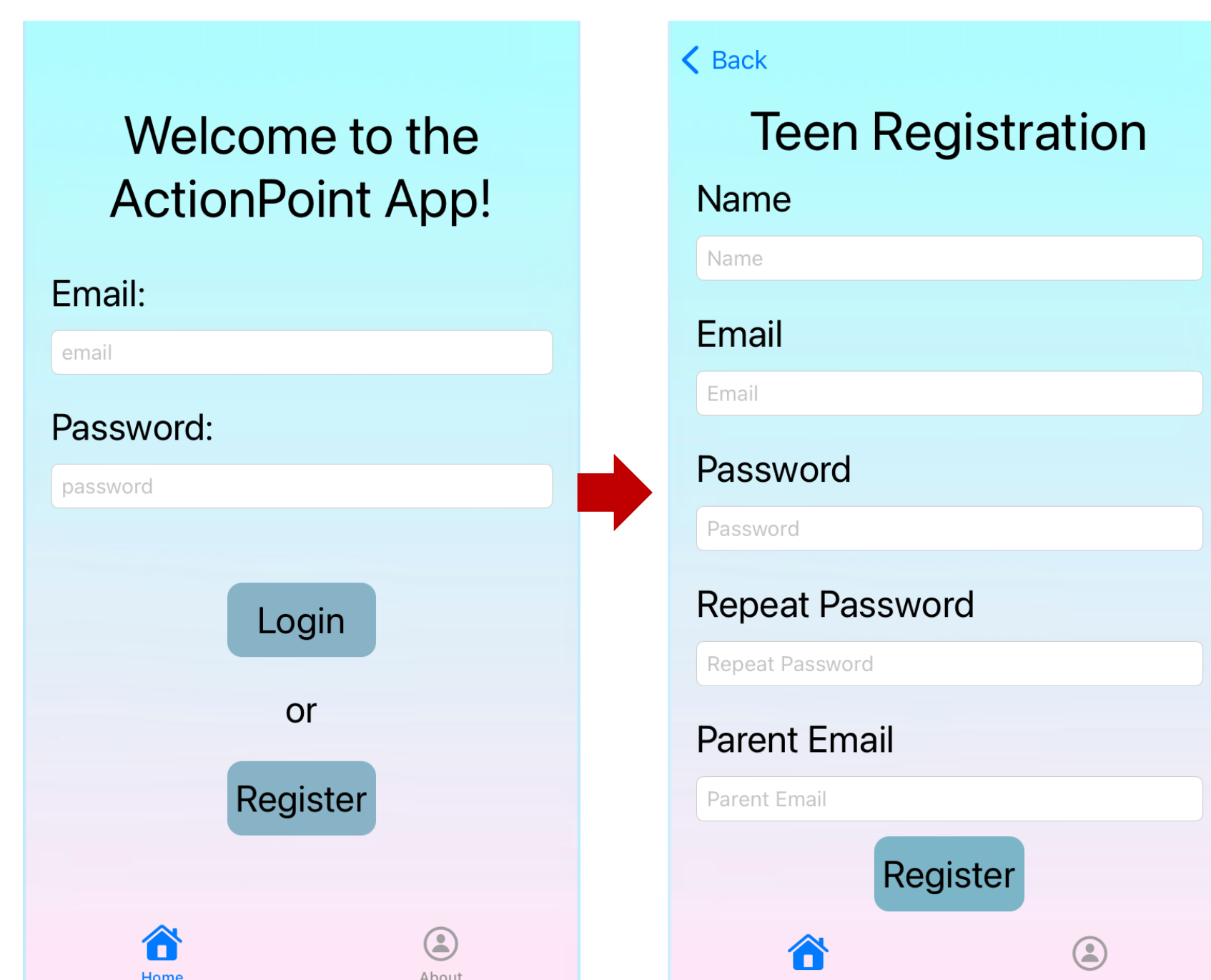
The ActionPoint app is a tabbed app, which allows users to fluidly switch screens to learn more about cyberbullying. Parents and teens complete ActionPoints, which are a series of interaction-based app modules where parents and teens engage in evidence-based activities. Parents can repeat these modules with each teen in their family on a one-to-one basis by selecting the teen they would like to complete the ActionPoints with when they begin. Using the interactive interfaces in the app, parent and teen's technological knowledge and social media familiarity can be measured in a series of surveys.

The ActionPoint app was implemented in Swift, Apple's programming language for building apps compatible with iOS devices. The survey responses are recorded in the user's device. Then, they are submitted to the server-side database. Server-side processing is performed using PHP and the Structured Query Language (SQL). The responses from a parent are sent to the corresponding teen and vice versa. Once the app receives the responses, it can then create a side-by-side comparison between the parent's and teen's answer



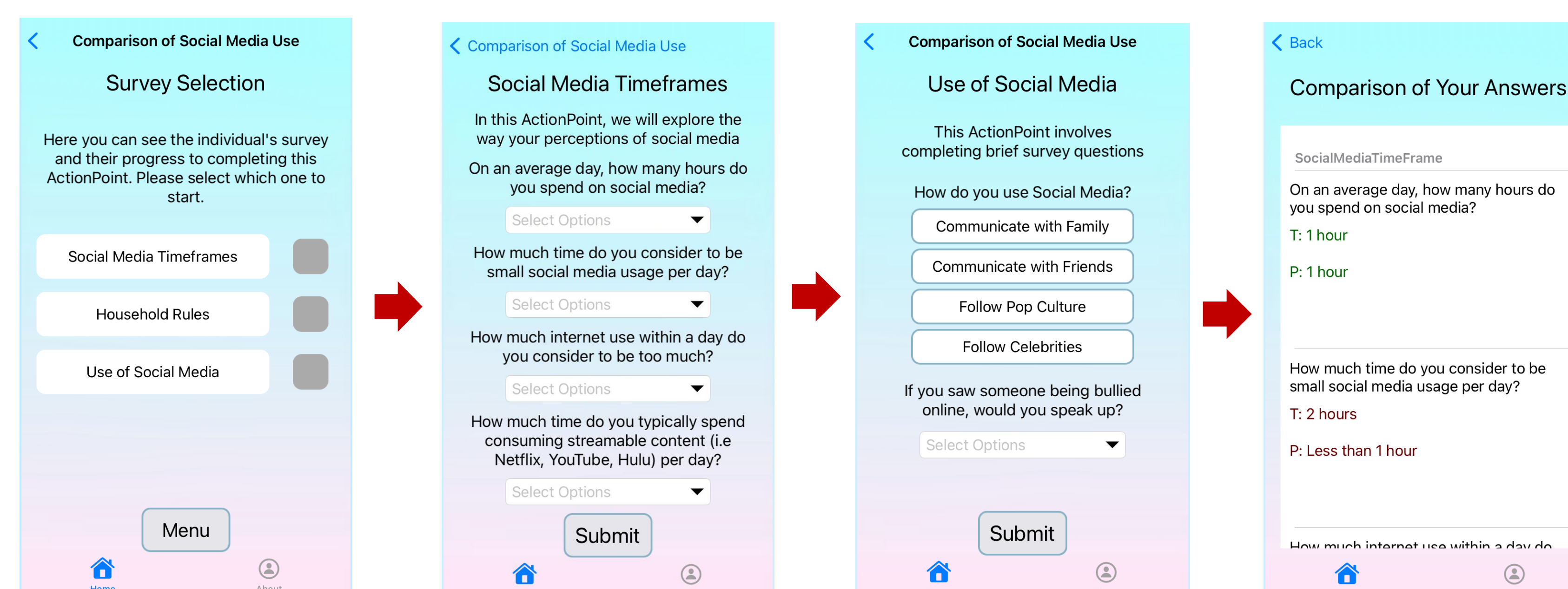
Using the App

When a parent and teen registers for the app, the parent's email links the two accounts, and they can begin to complete the ActionPoints. Each ActionPoint includes a brief overview of the purpose of the module and the steps parent and teen must take to complete it. There are six ActionPoints to complete. They span from Comparison of Social Media Use, Identifying Cyberbullying, Your Experiences, Bullying Rank, Social Media IQ, and Parent-Teen contract.



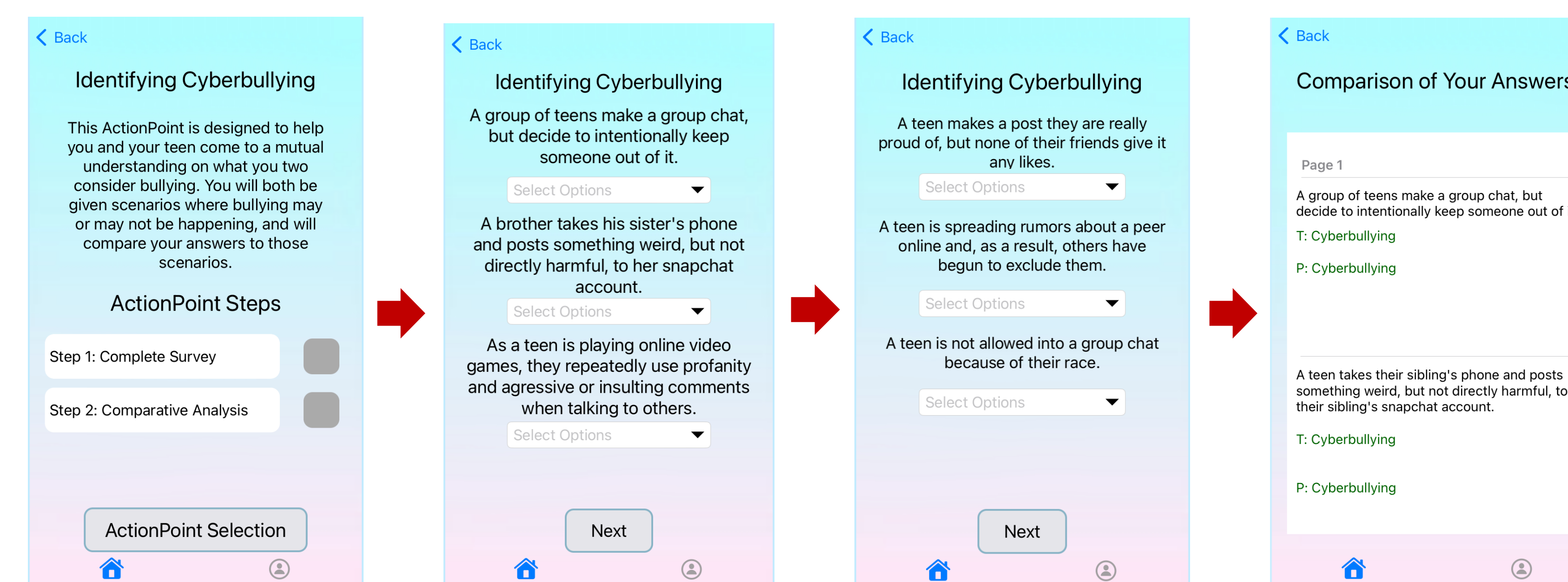
To learn more, visit: <https://bullyblocker.cs.luc.edu> or scan the QR code.

Comparison of Social Media Use ActionPoint



Teens and parents compare their perceptions of social media over the course of 3 surveys: Social Media Timeframes, Household Rules, and Social Media Use. The teen and parent can see a side-by-side comparison of their answers to educate and inspire discussion. This ActionPoint builds on previous psychology results [1, 4].

Identifying Cyberbullying ActionPoint



Teens and parents determine whether situations throughout the survey are considered bullying. Parents and teens then see a comparison of their answers to stimulate discussion to address their own interactions with cyberbullying and lessen the impact of the bystander effect. This ActionPoint builds on previous psychology results in [5].

References

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- [2] M. Anderson and J. Jiang, "Teens' Social Media Habits and Experiences," Pew Research Center, 2018.
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- [4] L. Blackwell, E. Gardiner and S. Schoenebeck, "Managing Expectations: Technology Tensions among Parents and Teens," in *ACM Conference on Computer-Supported Cooperative Work & Social Computing*, 2016.
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