Accounts for Children One-Pager

# Introduction

This document proposes an implementation of improvements regarding privacy and personal data protection, with special emphasis on users under 13 years of age (U13 users). These functionalities are derived from the [Children's Online Privacy Protection rule (COPPA)](https://www.ftc.gov/tips-advice/business-center/guidance/complying-coppa-frequently-asked-questions-0), [California Consumer Privacy Act (CCPA)](https://oag.ca.gov/privacy/ccpa#sectione) and GDPR, and they are inspired by the implementations done by other organizations such as Khan Academy.

The full technical design is available in [this document.](https://docs.google.com/document/d/1m46X9jlLD_kbu_CVVIDwAdUYWPsNTtFNlWUPQpdfDQ8/edit#heading=h.lt8gxb8noi8m)

# Design Overview

U13 will always be private and therefore they will not show up in rankings and their details will not be visible to any other user besides their parent and site admins.

**Database:**

* The database will need to be modified to store a link from U13 accounts to parental figure accounts, and to also store whether an account has been verified by the parent or not.
* Existing U13 accounts will be given 7 days to register the email address of their parent and for their parent to verify their account.

**API:**

* A list of APIs will be modified to disallow U13 from performing them. This includes all content creation APIs (create problem/contest/course/etc).
* A list of APIs will be modified to show only manually curated content (problems, courses and contests) to U13 and anonymous users. The only exception will be when a U13 was manually added as a participant of a private course/contest.
* Three new APIs will be created:
  + An API for parents to verify their children's account.
  + An API for users to request the deletion of their account. This will be performed by deleting all personal information from their account in the database and redacting their username.
  + An API for parents to get an activity report for their child. This should include logins, submissions, contests/course sign ups.

**Frontend:**

* Add a date of birth field in sign up form.
* Forward existing users who didn't record a birthdate to the edit profile page the next time they sign in.
* Add a field in the profile page where users can register their parent's account.
* Add a banner reminding U13 users they have X days left for their parents to verify their account.
* Add a button where users can delete their child's account or their own account.
* Add a new page where parents can view a report of their child's activity.
* Several other minor changes such as:
  + Hide "Create problem/contest/course" buttons for U13 users.

# Alternatives considered

* Not to serve users under 13.

# Estimated costs

12 weeks of engineering work.

* P0: Privacy improvements that apply to all accounts - 2 weeks
* P0: U13 user registration (record birth date + parent email) - 2 weeks
* P0: U13 user association + verification from parents (includes showing the banner to U13) - 1 week
* P0: Block APIs for U13 users (content creation, uncurated content, etc) - 1 week
  + P1: Make the corresponding changes to the UI (e.g. Hide "Create problem" button) - 1 week
* P1: Account deletability - 1 week
* P1: Let parents delete and see activity reports of their children - 2 week
* P1: Testing and bug fixing - 2 week

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# Status

* **September 5, 2022**
  + P0: Privacy improvements that apply to all accounts - 2 weeks
    - Mostly complete. There are blockers that do not depend on eng.
  + P0: U13 user registration (record birth date + parent email) - 2 weeks
    - Record birth date from UI: [PR](https://github.com/omegaup/omegaup/pull/6695)
    - Schema DB changes: ?
    - API changes to record birth date [[PR](https://github.com/omegaup/omegaup/pull/6695)] + parent email[[PR](https://github.com/omegaup/omegaup/pull/6710)]
  + P0: Datafix existing accounts / users that sign up using Google:
    - Request birth date from Google: Not started
    - Frontend changes to require users to record their birthdate + parent email if U13: Not started
    - Backend changes to clear personal information when a existing user becomes U13: Not started
  + P0: U13 user association + verification from parents (includes showing the banner to U13) - 1 week
    - API changes to associate with parent: ?
    - API changes to verify user via token: [PR](https://github.com/omegaup/omegaup/pull/6743)
    - FE changes to show banner: ?
  + P0: Block APIs for U13 users (content creation, uncurated content, etc) - 1 week
    - API changes to block APIs: [PR](https://github.com/omegaup/omegaup/pull/6718)
  + P1: Make the corresponding changes to the UI (e.g. Hide "Create problem" button) - 1 week
    - UI changes to hide unavailable options: ?
  + P1: Account deletability - 1 week
    - API changes to allow user to delete account: [PR](https://github.com/omegaup/omegaup/pull/6646)
    - Frontend changes to allow user to delete account: ?
  + P1: Let parents delete and see activity reports of their children - 2 week
    - API that generates report: ?
    - Frontend that displayes report: ?
  + P1: Testing and bug fixing - 2 week
    - Waiting on coding to be finished to start testing.
* **October 7, 2022**
  + P0: Privacy improvements that apply to all accounts - 2 weeks
    - Complete.
  + P0: U13 user registration (record birth date + parent email) - 2 weeks
    - Record birth date from UI: [PR](https://github.com/omegaup/omegaup/pull/6695)
    - Schema DB changes: [PR](https://github.com/omegaup/omegaup/pull/6710)
    - API changes to record birth date [[PR](https://github.com/omegaup/omegaup/pull/6695)] + parent email[[PR](https://github.com/omegaup/omegaup/pull/6710)]
  + P0: Datafix existing accounts / users that sign up using Google:
    - Request birth date from Google: [PR](https://github.com/omegaup/omegaup/pull/6777)
    - Frontend changes to require users to record their birthdate + parent email if U13: Not started
    - Backend changes to clear personal information when a existing user becomes U13: Not started
  + P0: U13 user association + verification from parents (includes showing the banner to U13) - 1 week
    - API changes to associate with parent: [PR](https://github.com/omegaup/omegaup/pull/6773)
    - API changes to verify user via token: [PR](https://github.com/omegaup/omegaup/pull/6743)
    - FE changes to show banner: [PR](https://github.com/omegaup/omegaup/pull/6798)
  + P0: Block APIs for U13 users (content creation, uncurated content, etc) - 1 week
    - API changes to block APIs: [PR](https://github.com/omegaup/omegaup/pull/6718)
  + P1: Make the corresponding changes to the UI (e.g. Hide "Create problem" button) - 1 week
    - UI changes to hide unavailable options: [PR](https://github.com/omegaup/omegaup/pull/6783)
  + P1: Account deletability - 1 week
    - API changes to allow user to delete account: [PR](https://github.com/omegaup/omegaup/pull/6646)
    - Frontend changes to allow user to delete account: ?
  + P1: Let parents delete and see activity reports of their children - 2 week
    - API that generates report: ?
    - Frontend that displays report: ?
  + P1: Testing and bug fixing - 2 week
    - Waiting on coding to be finished to start testing.