

Definitions

Definitions

Item: A single stimulus in an assessment.

Trial: A single stimulus/response pair.

Run: A collection of trials within a single assessment.

Assessment: A collection of items designed to assess a facet of the participant's reading ability.

Assignment: A list of assessments chosen for a participant to complete.

Administration: A collection of assignments assigned to an organization.


Organization: A collection of participants, participant administrators, and research administrators


Participant: A user with the ability to access the assessments within an assigned administration.


Researcher: A user with the ability to access the participant demographics and assignment run data for specified organizations.


Participant Administrator: A user with the ability to enroll participants in ROAR, generate assignment specifications for specified administrations. This user has the ability to access completion statistics and assignment scores for specified administrations.

Research Administrator: A user with the ability to enroll participants in ROAR, create Participant Administrator accounts, and design assessment and assignment specifications.

 **Firestore:** a document-based noSQL database from Firebase and Google Cloud. ROAR maintains two separate firestore instances: admin (for PII) and assessment (for deidentified assessment response data)

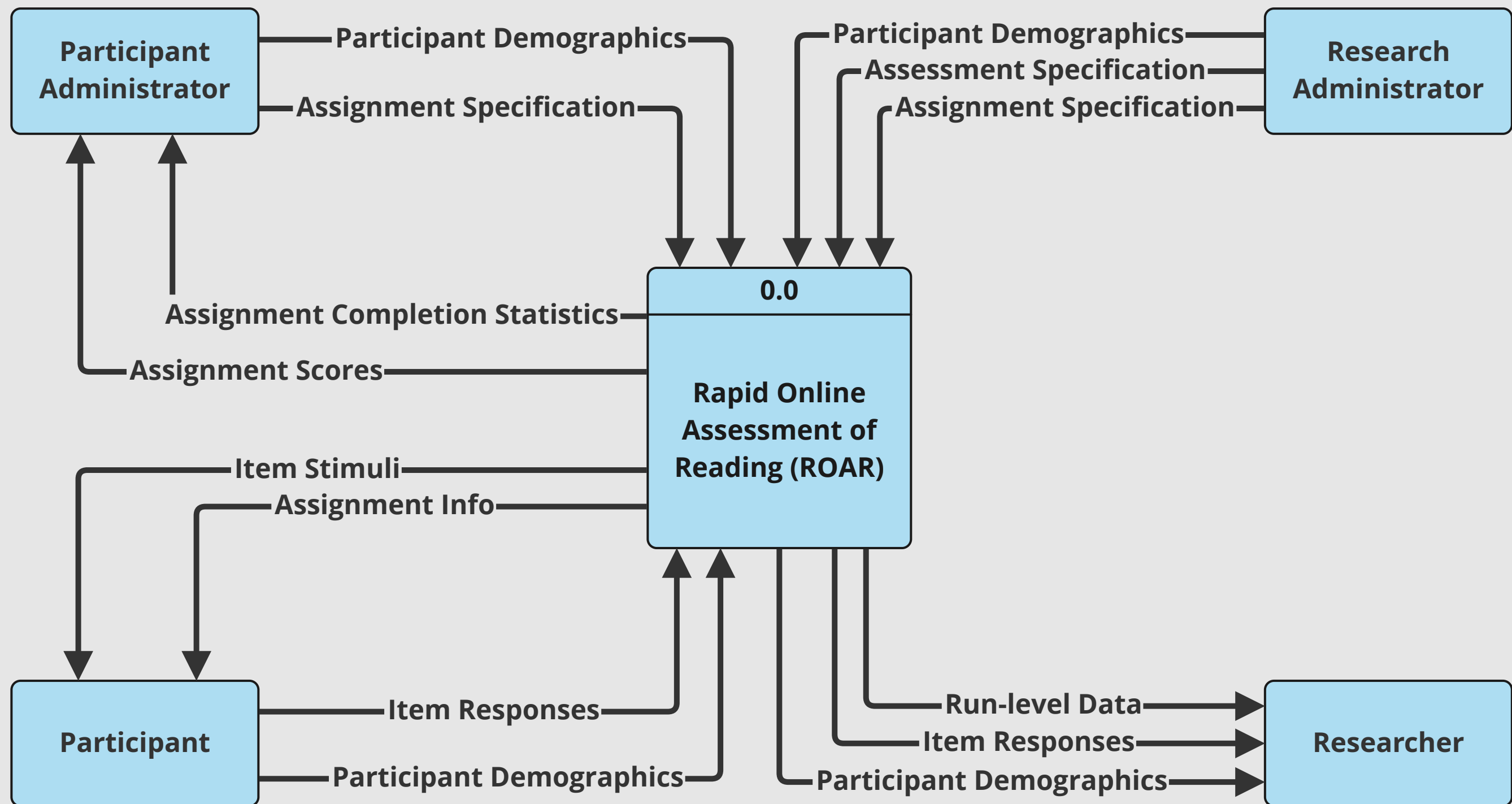
 **Firestore Security Rules:** Firestore access control and data validation is managed using these security rules.

 **Identity and Access Management:** Authentication and access control provided by Firebase Authentication

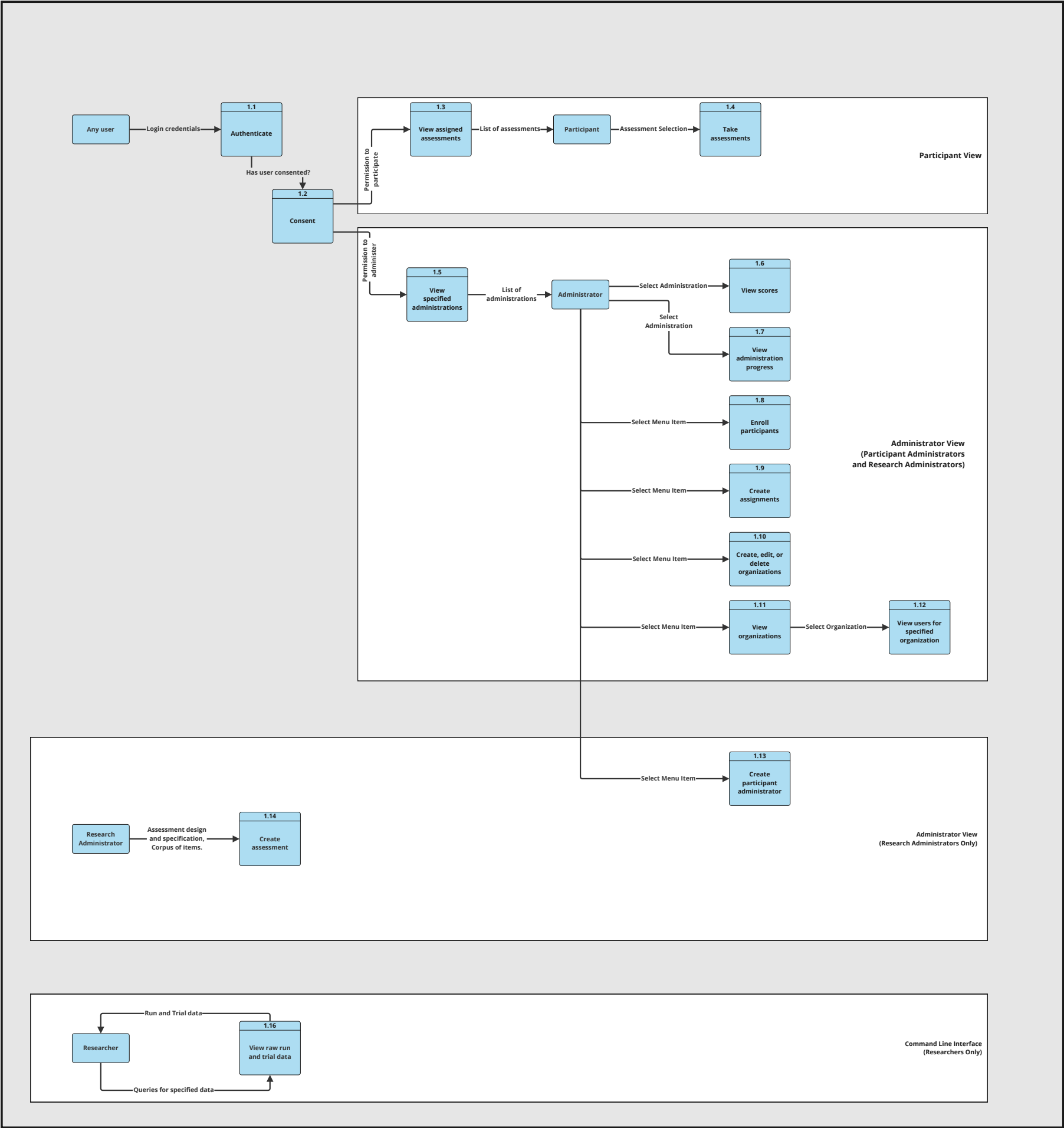
 **Firebase Cloud Functions:** a serverless framework for automatically running backend code in response to event triggers (e.g., database edits, user account creation, or on-call functions). ROAR uses cloud functions for some data-intensive operations and to keep the admin and assessment Firestore instances in sync.

Level 0 DFD

Level 0 DFD



Level 1 DFD



Level 2 DFD

