

Design Studio 3

“PlayTime”

Steven Rivera, Jin Hyuk Myung, Gurpreet Singh, Nena Anuli Ojukwu, Kaitlen Ngoc Han Ngo

Table of Contents

Primary Audience.....	3
Other Stakeholders.....	4
Design Work.....	6
Goals.....	6
Constraints.....	7
Assumptions.....	7
Final Design.....	9
App Functionality.....	9
Mobile App User Interface.....	11
Architecture Design.....	15
Level 1.....	15
Level 2.....	16
Level 3.....	17
UML Diagram.....	18
Database Entity/Relationship Diagram.....	19
Design Process.....	20
Initial Primary Audience Brainstorming.....	20
Initial Other Stakeholders Brainstorming.....	20
Brainstorming Process.....	21
Artifacts.....	23
Logbook.....	24

Primary Audience

- Children
 - Pre-School (ages 3-5)
 - Elementary School (ages 6-10)
 - Middle School (6th grade - 8th grade)
 - High School (9th grade -12th grade)
- PlayTime Volunteer
 - Volunteers will need to be able to conduct interviews with parents and child in order for them to be able to join the platform
- Parents and Legal Guardians
 - Parents and legal guardians are a crucial audience for PlayTime! as they play a significant role in managing their child's activities and ensuring their safety. The platform provides them with peace of mind by implementing stringent safety measures, such as volunteer interviews, parental monitoring, and a system for reporting concerns. Parents can actively engage in their child's playdate arrangements, schedule recurring play dates, and monitor their child's interactions, promoting a sense of security and trust in the platform
- Schools and Educators
 - Schools and educators form an important audience for PlayTime! as the platform encourages connections among kids from the same school. PlayTime! can collaborate with schools to facilitate introductions between students who may not have interacted before, fostering a sense of community within the school environment. Educators can also promote the platform as a tool for promoting socialization, cooperation, and the development of essential social skills among their students.

Other Stakeholders

- Parents
 - Parents and legal guardians of the participating children are key stakeholders in PlayTime! They entrust the platform with their child's safety and well-being, making it essential to provide transparent communication, robust safety measures, and easy-to-use parental monitoring features. Parental satisfaction and confidence in the platform are crucial for long-term adoption and usage.
- Schools
 - Schools and educators have a stake in PlayTime! as it can enhance socialization and provide opportunities for positive interactions among students. By encouraging students to connect with peers from their own school, PlayTime! complements and supports the school's efforts in fostering a sense of community and promoting healthy play among students.
- Caretakers and Volunteers
 - Volunteers play a significant role in the success of PlayTime! as they conduct Zoom interviews, monitor activities, and address concerns raised by kids and parents. Volunteers are responsible for upholding the safety measures and investigating any reported issues on the platform. Their dedication and commitment contribute to creating a safe and positive community for the users. Continuous training and support for volunteers are crucial to their effectiveness and the platform's overall success.
- Parks
 - Parks would be a common place to hold dates and play in. The people who regulate the park may have say in how the platform is implemented
- Gamings Companies
 - Gaming companies might be more incentivised to implement split screen functionality into their games to allow kids to play together on one device
- Toy Companies
 - Toy companies will be interested in creating more toys that can be used together in a group setting
- GPS Companies

- If children want to meet up with one another they would need to inform each other of their locations and meet up areas. The platform may want to implement at least a map of some sort.
- Legal Authorities (laws regarding children)
 - The government would be interested in making sure that the platform protects children's privacy. Given the involvement of children and the need to ensure their safety, data protection and privacy authorities are important stakeholders. PlayTime! must comply with applicable laws and regulations related to data privacy, security, and child protection. Collaboration with authorities is essential to establish and maintain best practices, protect user data, and ensure compliance with legal requirements.
- "Kids Should Be Kids" Foundation
 - As the client and funder of PlayTime!, the "Kids Should Be Kids" Foundation is a crucial stakeholder. They have a vested interest in ensuring the success and impact of the platform. Their mission aligns with PlayTime!'s objective of promoting real-life play and social interactions among children. The foundation provides the necessary funding for development, deployment, and maintenance of the platform, and their reputation is tied to its effectiveness and safety
- PlayTime! Development Team
 - The development team responsible for designing, building, and maintaining the PlayTime! platform is a key stakeholder. Their expertise and dedication are essential for creating a user-friendly, secure, and innovative platform. The team needs to collaborate closely with the "Kids Should Be Kids" Foundation to understand their vision, requirements, and goals, ensuring that the platform meets the needs of the primary audience while prioritizing safety and usability.

Design Work

Goals

- Foster increased physical and social interaction among children by providing a platform that encourages real-life playdates, enabling kids to connect, collaborate, and build meaningful relationships
- Empower children to organize playdates with multiple kids, fostering a collaborative and inclusive environment where they can engage in shared activities, develop social skills, and build lasting friendships
- Establish a secure and trusted environment for children through rigorous safety measures, including Zoom interviews for admission, ensuring that every child on the platform undergoes a thorough verification process
- Enable parents to actively monitor their children's online activities within the platform, providing them with tools and insights to ensure their child's safety, track interactions, and promote digital engagement
- Deliver a compelling and innovative product that showcases a distinctive vision, offering a refreshing experience for children, parents, volunteers and schools/educators
- Provide a system that allows users to easily set up regularly scheduled playdates, ensuring a consistent and reliable platform for children to participate in ongoing social engagements
- Facilitate easy and seamless connections for new children in a particular area, enabling them to quickly and effortlessly reach out and connect with other kids
- Enhance the platform's functionality by transparently displaying the availability and preferences of playdates
- Establish a robust reporting system that enables children and legal guardians to promptly report concerning members
- Implement a comprehensive monitoring system for legal guardians, enabling them to actively track and oversee their children's interactions, playdate arrangements, and overall engagement on the platform

- Provide a user-friendly interface that offers flexibility and convenience in scheduling play dates

Constraints

- Children must be exclusively matched with others within their own age group
- Children who request to meet individuals from their own school should be appropriately matched with a child of that same school
- Children must be required to meet within a reasonable distance of their initial location.
- Certain dates, times, and availability of transportation may extend the distance.
- Children must be able to find children near them
- Safety and security must be prioritized
- The app must provide free access to all users
- The application should be usable everywhere in the world. So it needs to adhere to privacy, security regulations, and standards on a global scale

Assumptions

- The details of the primary audience will be for children between the ages of 3-17. Anything below that will most likely be babies that aren't developed enough for casual dates and anything above are adults that don't require parent supervision.
- Since you will want to frequently check the status and information of the date the client most likely wants the platform to be in the mobile application form
- The dates are meant for the children to enjoy themselves so it makes most sense to assume that they will be the ones to decide what kind of activities they want to participate in throughout the date.
- “Recurring” playdates will occur at the same place as it makes for the location to be the same if the participants were previously able to reach the place. The activity and time may, however, differ.

- Dates should only be arranged with people within the same age group as it wouldn't be enjoyable and be much of a date if people of different mental levels were paired up.
- It makes sense to assume our primary audience will have a mobile device to use our software
- The mobile device will need access to the internet to utilize some of our functionalities such as relaying date information, so the audience will have access to the internet.
- Children provide accurate and truthful information when creating their profiles, including interests, hobbies, and age
- The client most likely wants to expand the target audience as much as possible so we will include multi-language support and allow the application to be accessed worldwide.

Final Design

App Functionality

- A parent will be able to create an account after interview
 - Parent accounts must schedule an interview with their child with a PlayTime volunteer to create a parent account. After a parent account has been verified that they are actually a parent they will be able to create a child account for their child
 - Child accounts will consist of their interests, school, location, and availability.
 - An account will have its name, school (if applicable), age, face profile, and hobby information.
- Users will be able to schedule play dates with other children in their age range
 - PlayDates can either be one-on-one or group play dates
 - PlayDates can be rescheduled if both parties agree to
 - User will be able view and organize them within the platform
 - Users will be able to cancel one-on-one play dates or leave group playdates
- Parental monitoring and control,
 - Allows parents to track the location of their children.
 - Monitor who their child is messaging.
 - Raise concerns about other children/parents.
- Users will be able to search for other users with:
 - Similar interests
 - Same school
 - Similar age range
 - Availabilities
 - Distance
 - Location
 - After find a user profile they can add they can send a friend request to add them to their friend list
- Communication and messaging
 - Texting, which is accessed through the friend list.
- Have a friends list

- add/remove friends on list
 - Filter friends by characteristics: hobby, name, school, and age.
- Notifications
 - Alert when a playdate has been requested
 - If a user cancels a PlayDate the other user will receive a notification that the playdate was canceled
- Resources and help hub where users can report issues, block other users, or ask for help on how to navigate the platform
- Zoom Interviews
 - Make the interviewing process simple enough.
 - Will take note of their school and parent behavior/attitude.

Mobile App User Interface

Interactive UI Walkthrough: [figma](#)

The image displays three screenshots of the PlayTime mobile application interface, arranged horizontally.

Left Screenshot (Home Screen):

- Visual:** A large green circular graphic featuring three diverse individuals (two adults and one child) in athletic wear, standing outdoors under a bright sun.
- Text:** "Plan Your Next Play Date" in bold black font.
- Text:** "Discover new potential playing partners and activities to do" in smaller gray font.
- Button:** "Register Now" in white text on a green rounded rectangle.
- Description:** This is the greeting page when the app is first opened. The register button allows users to schedule a zoom meeting with a PlayTime volunteer to get approved for account creation.

Middle Screenshot (Home Screen):

- Header:** "PlayTime" with a play icon and a green "+" button labeled "Schedule Date".
- Section:** "Upcoming Play Dates" (with a green background)
- Data:** Two items listed:
 - Activity:** 6/12/2023, University of California Irvine, CA 92697. **Participant(s):** Three icons (green, blue, purple). **Icon:** Car.
 - Activity:** 6/13/2023, Campus Dr, Irvine, CA 92617. **Participant(s):** Two icons (purple, pink). **Icon:** Person walking.
- Section:** "Recommended Friends" (with a light green background)
- Data:** Three user profiles shown as circles with initials:
 - First, Last
Intrest 1
Intrest 2 **Add**
 - First, Last
Intrest 1
Intrest 2 **Add**
 - First, Last
Intrest 1
Intrest 2 **Add**
- Section:** "Trending Activities" (with a light green background)
- Data:** Two items listed:
 - Rank:** 1 **Activity:** Soccer **Searches:** 10K+
 - Rank:** 2 **Activity:** Mario Kart **Searches:** 7.5K+
- Bottom Navigation:** Icons for Home (house), Search (magnifying glass), Messages (speech bubble), and Account (person).
- Description:** This is the home page of the app. It shows a list of upcoming play dates, some recommended users to add as friends, and a trending activities section showing the most popular activities. The user can schedule a playdate by click on the green button on the top right of the app

Right Screenshot (Search Screen):

- Header:** "PlayTime" with a play icon.
- Input:** "Search People, Activities" with a magnifying glass icon.
- Bottom Navigation:** Icons for Home (house), Search (magnifying glass), Messages (speech bubble), and Account (person).
- Description:** This is the search page of the app. It allows users to search for other people and also to search for activities to do

PlayTime ➔

Messages

-  Friend
Lorem ipsum dolor sit amet
-  Friend
Lorem ipsum dolor sit amet
-  Friend
Lorem ipsum dolor sit amet
-  Friend
Lorem ipsum dolor sit amet
-  Friend
Lorem ipsum dolor sit amet



Home



Search



Messages



Account

PlayTime ➔

Friend

- Lore ipsum dolor sit amet
- Lore ipsum dolor sit amet, consectetur adipiscing elit
- Lore ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor

Send Message

Home



Search



Messages



Account

PlayTime ➔

My Profile

[Edit Profile](#)Friends
7PlayDates
3

First, Last

15

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Favorite Activities

- Activity

Friend Requests 2

-  First, Last
Similar Interest(s): Activity, Activity...
[Accept](#) [Deny](#)
-  First, Last
Similar Interest(s): Activity
[Accept](#) [Deny](#)



Home



Search



Messages



Account

This is the message page of the app. It allows users to view and send messages to their friends

This is an example of a message conversion with a friend

This is the account page of the app. It shows a concise summary of the user's profile which is what others see. It also will show a friend request sections if the user has any pending friend requests

Cancel **Schedule**

Activity	Enter Name
Date	Select Date
Recurring	Make Selection
Max Distance	12 Miles
Location	Enter Address
Invite Participant(s)	Friends
Transportation	Make Selection
Additional Notes	Enter Notes

Home Search Messages Account

Cancel **Schedule**

Activity	Enter Name
Date	Select Date
Recurring	Make Selection
Max Distance	12 Miles
Location	Enter Address
Invite Participant(s)	Friends
Transportation	Make Selection
Additional Notes	Enter Notes

June 2023

SUN	MON	TUE	WED	THU	FRI	SAT
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

Home Search Messages Account

Cancel **Schedule**

Activity	Enter Name
Date	Select Date
Recurring	Make Selection
Max Distance	12 Miles
Location	Enter Address
Invite Participant(s)	Friends
Transportation	Make Selection
Additional Notes	Enter Notes

Select

- Once
- Weekly
- Bi-Weekly
- Monthly

Cancel OK

Home Search Messages Account

This is the view the user sees when scheduling a new play date. It allows the user to enter all the necessary information to successfully schedule a play date

A simple way for the user to ender the date of when the play date will take place

Allows the user to select how often this play date is meant to occur

Schedule

Cancel	Schedule
Activity	Enter Name
Date	Select Date
Recurring	Make Selection
Max Distance	12 Miles
Select	
Locat	Walking
Invite	Car
Trans	Bus
Addit	Other
Cancel OK	



Allows the user to select the mode of transportation they will take to arrive at the playdate

PlayTime

Activity
6/12/2023
University of California Irvine,
Irvine, CA 92697

Participant(s)

	First, Last (you)
	First, Last
	First, Last
	First, Last

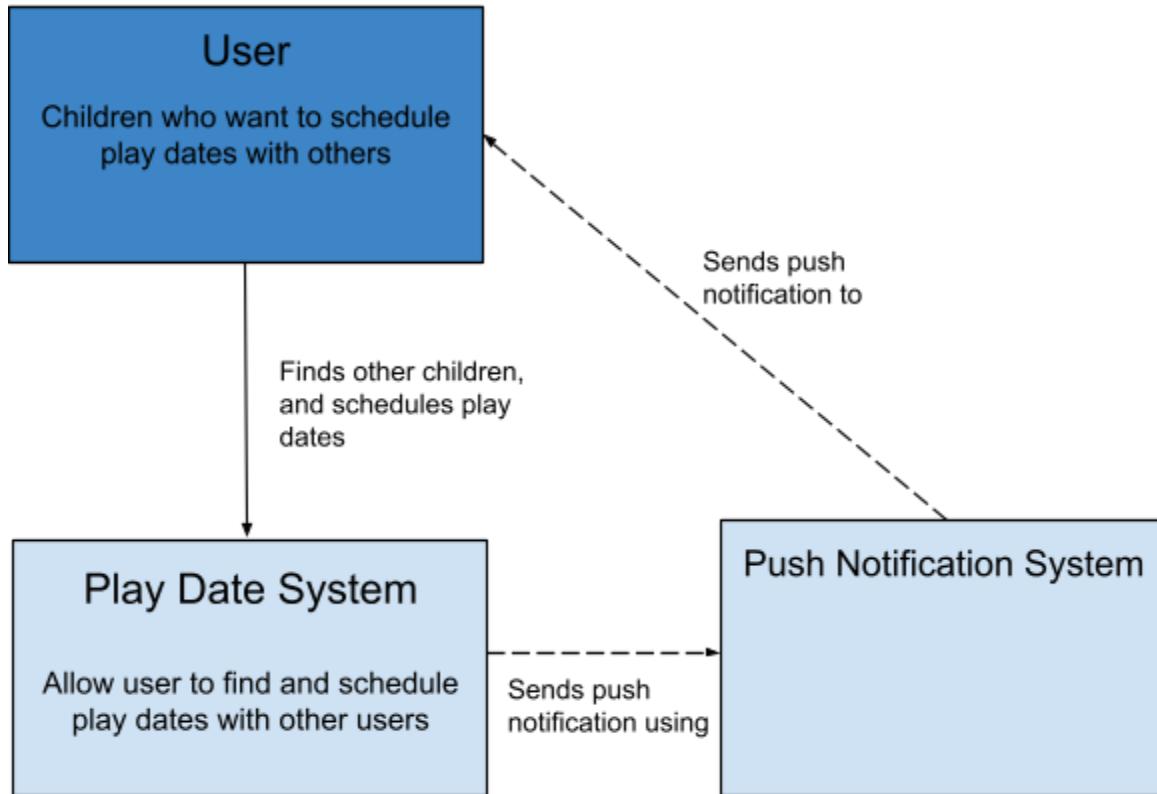
Leave **OK**



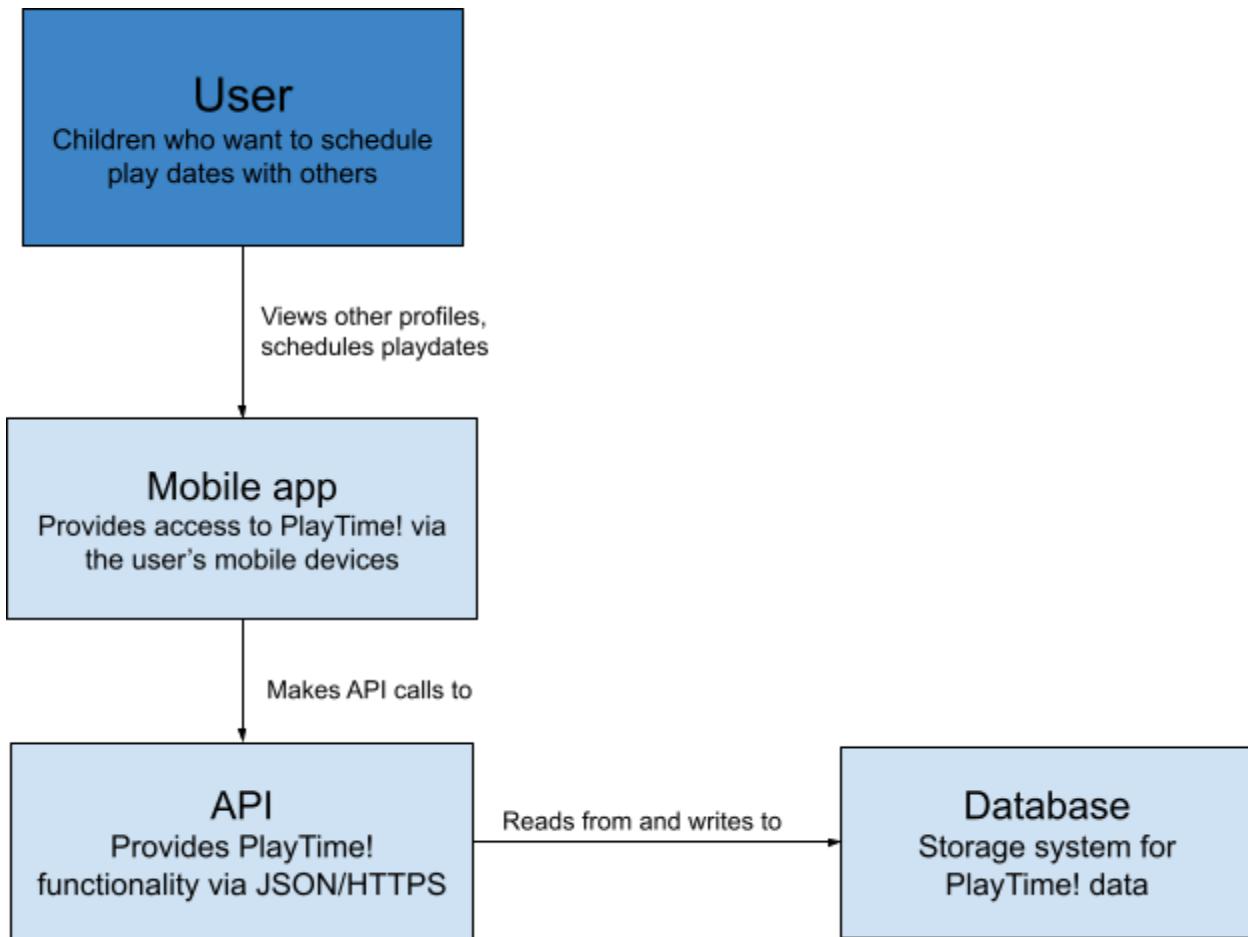
When a user clicks on one of the upcoming play date cards they will get an expanded view which contains more information about the play date

Architecture Design

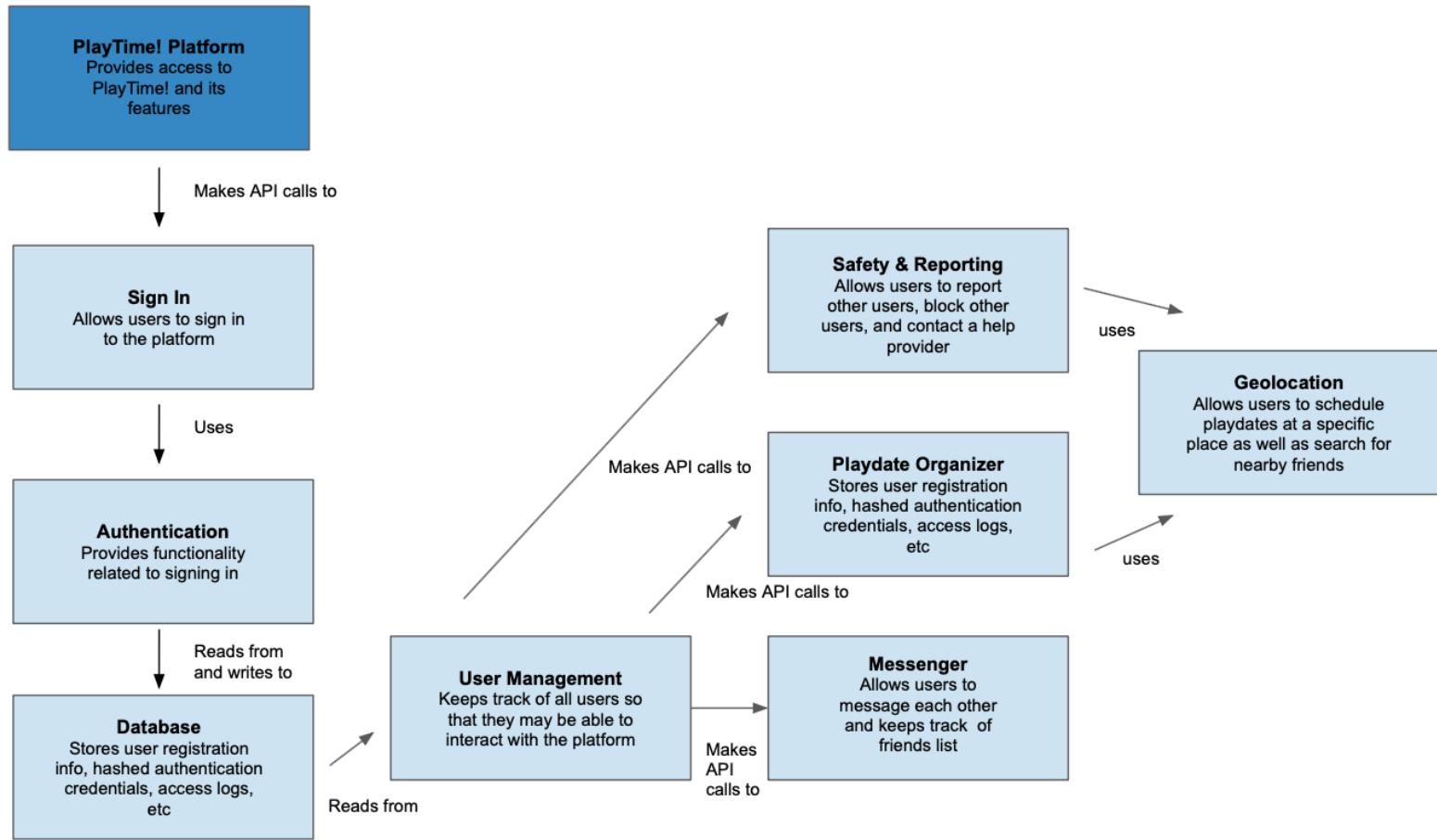
Level 1



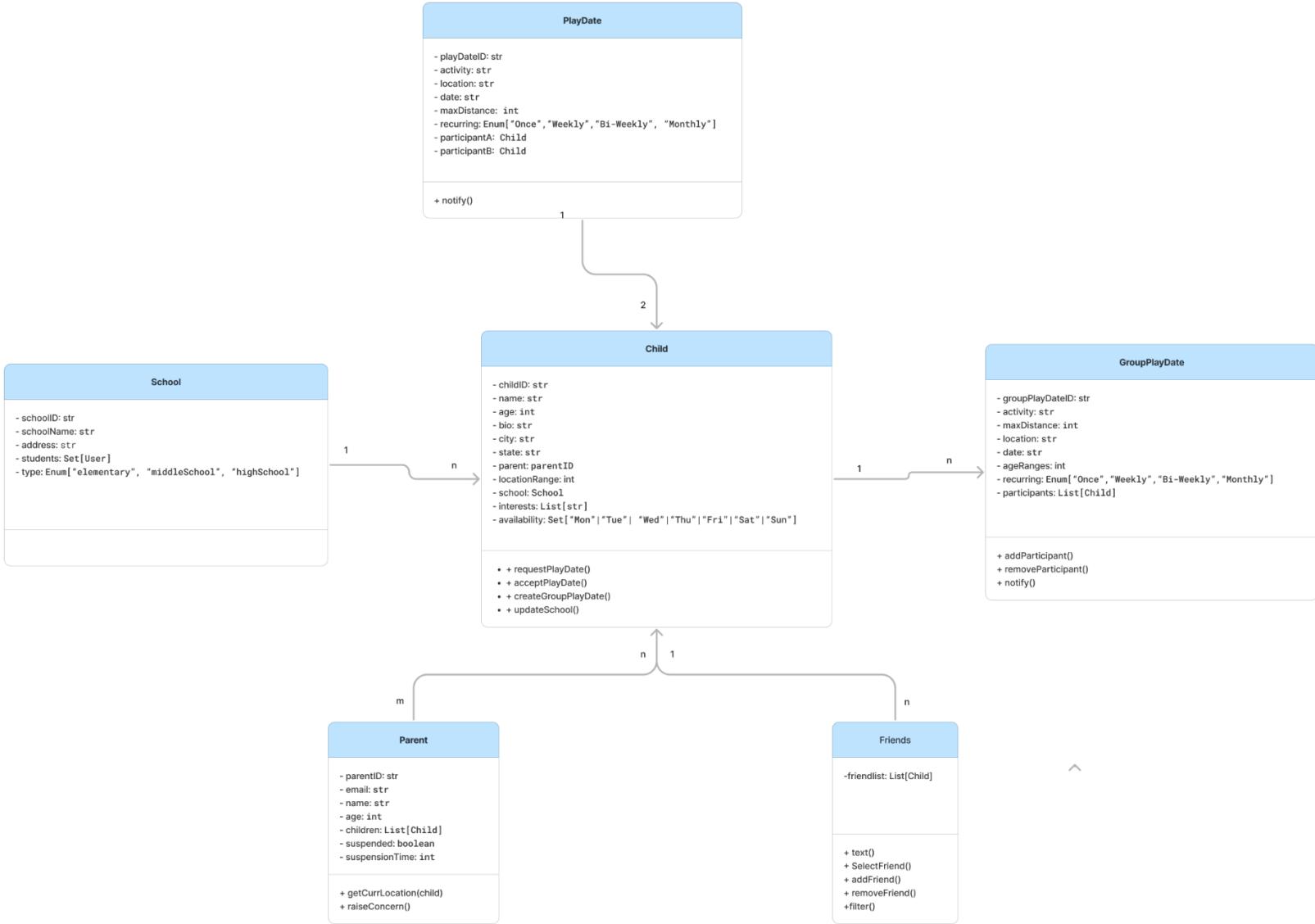
Level 2



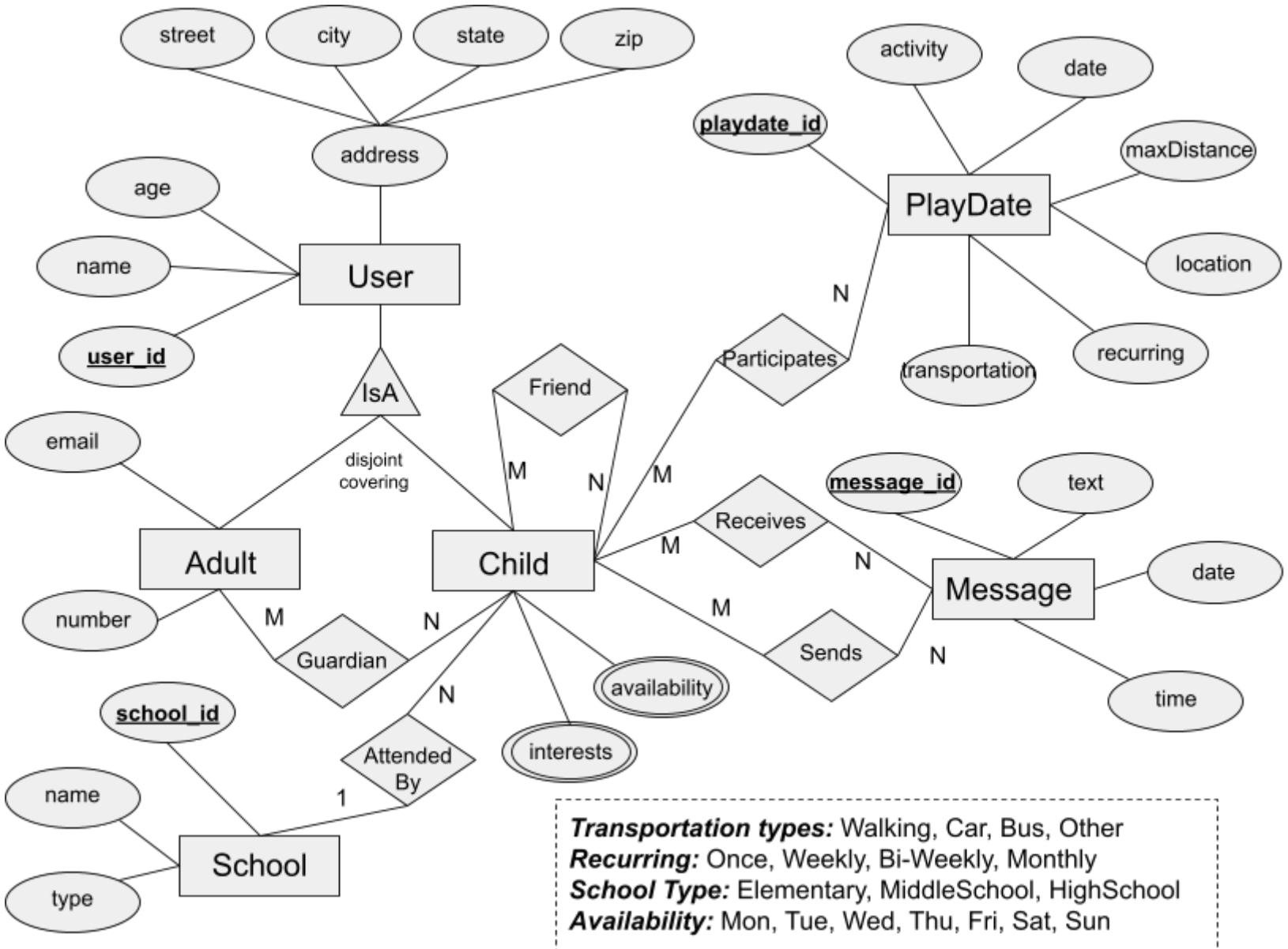
Level 3



UML Diagram



Database Entity/Relationship Diagram



Design Process

Initial Primary Audience Brainstorming

- Children
 - Pre-School (ages 3-5)
 - Elementary School (ages 6-10)
 - Middle School (6th grade - 8th grade)
 - High School (9th grade - 12th grade)
- PlayTime Volunteer
 - Volunteers will need to be able to conduct interviews with parents and child in order for them to be able to join the platform

Initial Other Stakeholders Brainstorming

- Parents
 - Parents will want to ensure the safety of their children and be confident that their children are only able to set play dates with children of similar age
- Schools
 - School will be interested in this platform as it would foster greater social skills among their students
- Caretakers
 - Caretakers may want to use the platform as a form of socialization for the children that they are taking care of as a way to ease their jobs
- Parks
 - Parks would be a common place to hold dates and play in. The people who regulate the park may have say in how the platform is implemented
- Gamings Companies
 - Gaming companies might be more incentivised to implement split screen functionality into their games to allow kids to play together on one device
- Toy Companies
 - Toy companies will be interested in creating more toys that can be used together in a group setting
- GPS Companies

- If children want to meet up with one another they would need to inform each other of their locations and meet up areas. The platform may want to implement at least a map of some sort.
- Legal Authorities (laws regarding children)
 - The government would be interested in making sure that the platform protects children's privacy

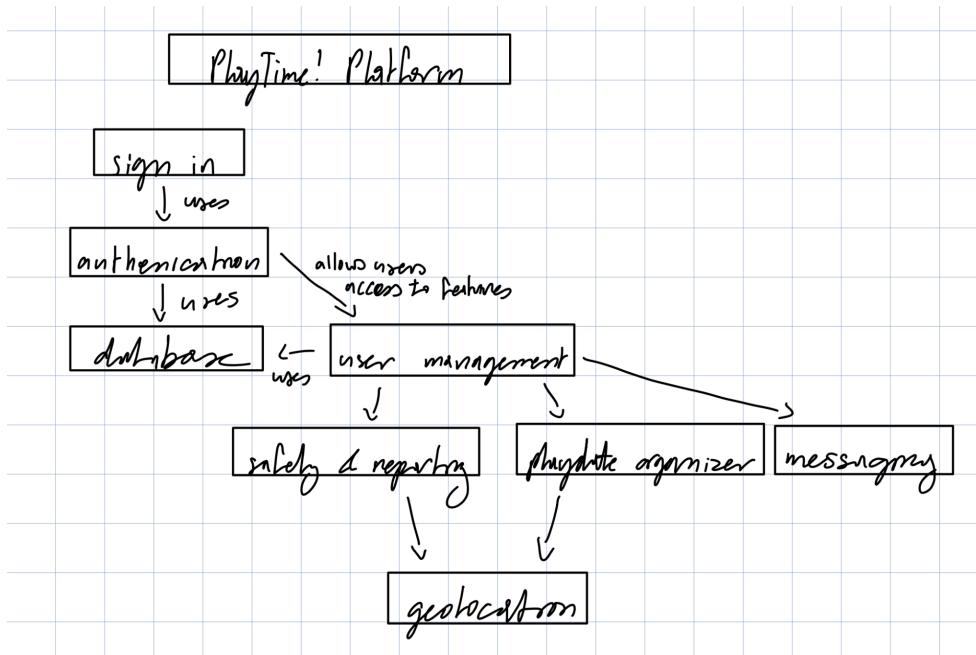
Brainstorming Process

Goals	Constraints	Assumptions
<ul style="list-style-type: none"> ● Increase physical and social interaction with kids. ● Allow kids to organize play dates with multiple kids ● Making it safe for children to use. (Zoom interviews for admission) ● Having parents able to monitor their children's online activities ● Having a viable product with a unique vision ● Being able to set up regularly scheduled play dates. ● Allow new children in the area to easily get in touch with other kids ● Make transparent the preferences and 	<ul style="list-style-type: none"> ● Children should be matched within their own age group ● Children who request to meet those in their own school should be appropriate matched with a child of the same school ● Children should only be required to meet within a reasonable distance of their initial locations. Certain dates, times, and availability of transportation may extend the distance. ● Children must be able to find children near them ● A major thing to keep in mind is safety and security. ● The app must be free to use. 	<ul style="list-style-type: none"> ● Children using the platform will be from the age 3-17 ● The platform will be a mobile application ● Children will decide on the type of play date they want. Whether it be gaming, soccer, etc. ● Recurring playdates will occur at the same place ● Children will only have play dates with other children of similar age ● Children will have mobile device ● Children will have access to the internet ● Children provide accurate and truthful information when creating their profiles, including interests, hobbies, and age ● All children and parents/guardians will be interviewed over

<p>availability of play dates</p> <ul style="list-style-type: none"> ● Allow children and legal guardians to report concerning members ● Legal Guardian of the children will have a monitoring system for their children ● Provide flexibility and convenience in scheduling play dates. 	<ul style="list-style-type: none"> ● The application should be usable everywhere in the world. So it needs to comply with privacy and security measures. 	<p>Zoom by a PlayTime volunteer.</p> <ul style="list-style-type: none"> ● This application will be usable everywhere in the world. ● There will be multi-language support.
Ideas	Opinions	Decisions
<ul style="list-style-type: none"> ● Agree on a set location for a playdate ● Children without transportation should be designated a limit of one mile towards the playdate area ● Children with transportation should be designated a limit of ten miles towards the playdate area ● Children should be able to set availability and preferences for play date timings to find compatible partners ● Children should be able to receive notifications and reminders about upcoming appointments ● Children should be able to share feedback and rate their play date experiences 	<ul style="list-style-type: none"> ● Safety measures should be a top priority, with strict verification processes ● Children should be able to have a designated limit bigger than one mile and children with transportation having a limit of ten miles is okay. ● It's a good idea for children to be able to reschedule playdates and be able to claim their preference for what they want in a date ● There should be a texting and calling feature as a means of communication instead of just one or the other ● Children should be able to schedule recurring playdates 	<ul style="list-style-type: none"> ● The software will be a mobile application at first ● There will be a friends list that contains a user's added friends and their profile. You will be able to filter through the list ● The software will provide only texting features as its communication, which can be accessed through the friend's list, between the users ● Children will only be allowed to plan dates within their own age group and when a date is requested, approved, or canceled the user will receive a notification ● There will be a max limit for playdate up to approximately 30 miles

<ul style="list-style-type: none"> • Children should be able to communicate with playdate partners on secure messaging • The children should request playdate schedules and the parents should be given a request that can be approved or denied 	<ul style="list-style-type: none"> • Children should be able to rate their experience on playdates 	
--	---	--

Artifacts



Logbook

Date	Task	Team Members
May 29, 2023	<ul style="list-style-type: none">• Brainstormed Primary Audience• Brainstormed Constraints• Brainstormed Stakeholders• Brainstormed Goals	Steven Rivera Jin Hyuk Myung Gurpreet Singh Nena Anuli Ojukwu
Jun 1, 2023	<ul style="list-style-type: none">• Create rough draft of UML diagram• Added to constraints, ideas, and assumptions	Steven Rivera Nena Anuli Ojukwu
Jun 2, 2023	<ul style="list-style-type: none">• Brainstormed Architecture Design	Steven Rivera Nena Anuli Ojukwu
Jun 6, 2023	<ul style="list-style-type: none">• Finalized primary audience and other stakeholders• Started on UI design• Started on ER diagram for database schema• Created rough draft of level 3 diagram	Kaitlen Ngochan Ngo Steven Rivera Jin Hyuk Myung Gurpreet Singh Nena Anuli Ojukwu
Jun 7, 2023	<ul style="list-style-type: none">• More UI design	Steven Rivera
Jun 8, 2023	<ul style="list-style-type: none">• Finalized UI design• Completed ER diagram	Steven Rivera
Jun 9, 2023	<ul style="list-style-type: none">• Started on Final Draft document• Finished Level 1 and 2 architecture diagram	Kaitlen Ngochan Ngo Steven Rivera Jin Hyuk Myung Gurpreet Singh Nena Anuli Ojukwu