

Data Description Document (Deliverable #2)

APP NAME: “*Band Builder*”

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SWE5003 Spring 2022

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# Data Description Document

## Overview

The purpose of this document is clearly defining all of the data types required to build the “*Band Builder*” application to the greatest extent possible. The primary functionality of the “*Band Builder*” application can be broken into three distinct primary entities: users, communities, and teams. Our goal within the application is to promote growth of distinct musical communities across the United States, and we believe that the structure proposed here has the capability to do just that. The “user” entity is at the core of our application. Every user will be given the tools needed to fully express their unique musical identity. The idea behind the “team” entity is that it will make organizing small working groups or jam sessions incredibly fluid and easy to manage. Communities are intended to be large groups of people that are passionate about a specific music genre or instrument, or maybe communities that are based on locality. The purpose of communities is to be flexible, inclusive, and to facilitate creativity and connectivity within them. Additional entities that will be discussed within the document will be advertisement data and site-specific data. Throughout this document we will list the entity categories, relationship types, and the data origins.

## Data Types Required

The core entity that “*Band Builder*” is built around is the user. There are many data components that make up the user. Every user will have a profile. Profiles are comprised of the following data types:

1. Their Name (First, Last, Middle, Suffix)
2. A short textual biography about themselves
3. Their Age (18+ only)
4. Security preferences (settings that allow others to view your profile)
5. UI preferences (light/dark mode or colorblind mode)
6. Profile Images
7. Video Clips / Sound Clips
8. Social Media Links
9. Location settings (search radius, current location)
10. Calendars (setting schedules and reminders)
11. Login Information (Username, Password, Security Questions)
12. Friends lists (favorites, groups, followers)
13. Payment Information (Payment types, card information, subscription status)
14. Private Message Logs (messages, group chats, videos/clips, timestamps)
15. Public Message Logs (comments, likes/dislikes, timestamps)
16. Music Preferences (Instruments, Genres, years of experience)

Teams are a critical component of “*Band Builder*” as well. These are designed to be the primary tool used to establish jam sessions amongst your peers. Teams have the built-in functionality to

communicate with group members, schedule sessions, set reminders and notifications. Teams are comprised of the following data types:

1. Member Lists (Team Leads/Members)
2. Group Message Boards (Posts, Videos, Images)
3. Calendar (Rehearsal times, Member Availability, Reminders)

Communities are meant to be catalysts for bringing people together that are bonded by similar musical backgrounds. An example of a community would be a “saxophonist community” where musicians can bond, share advice, establish/promote events relevant to the saxophone. Every community will have an owner, maintainers/moderators, and regular members. Within each community will be the following data types:

1. Community Profiles (Profile Images, Descriptions/Biographies, Photo/Video Galleries)
2. Member Lists (Members, Maintainers, Owners)
3. Public Message Board (Posts, Videos, Sound Bites)
4. Music Preferences (Genres, Instruments)

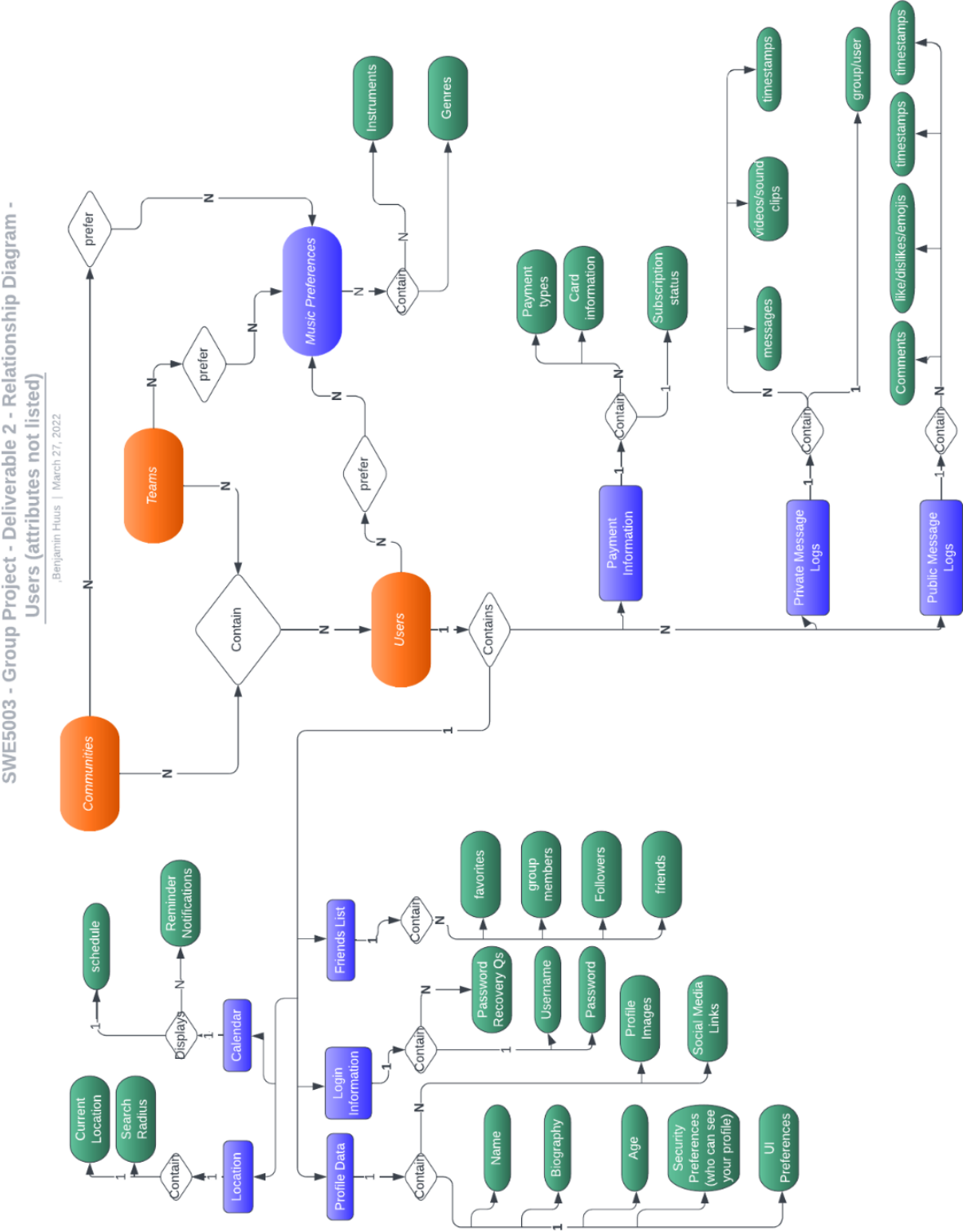
Additional Data that will need to be maintained is the site data itself, which is comprised of the site name, descriptions, images/styles, function lists, and headers. There will also be sponsor data for advertisements that run for unpaid users.

### **Entity Lists, Relationships, Origins and Attributes**

USERS					
Entity	Relationship Action	Entity	Relationship Type	Origin	Attributes
Profiles	have	Name	One-To-One	User Generated	First, Last, Middle, Suffix
Profiles	have	Biography	One-To-One	User Generated	Content
Profiles	have	Age	One-To-One	User Generated	Age, Birthday
Profiles	allow	Security Preferences	One-To-One	System Generated	Friends of Friends, Friends Only, Everyone
Profiles	prefer	UI Preferences	One-To-One	System Generated	Light/Dark mode, Colorblind mode
Profiles	choose	Profile Pictures	One-To-Many	User Generated	Images
Profiles	link	Social Media Links	One-To-Many	User Generated	Links
Profiles	have	username	One-To-One	User Generated	username
Profiles	have	password	One-To-One	User Generated	password, expiration
Profiles	have	Password Recovery	One-To-Many	User Generated	Question, Answer
Profiles	contain	Friends List	One-To-One	System Generated	Favorites, Groups, Followers, Friends
Calendars	contain	schedule	One-To-One	User Generated	Events, Reminders
profiles	have	Location	One-To-One	Data generated based on user	Current Location, Search Radius
profiles	have	Payment Information	One-To-Many	User Generated	Payment Types, Card Numbers, Expiration, CSV, Name, Zip code
profiles	have	Subscription Status	One-To-One	System Generated	Free Account, Premium Account
users	store	Private Message Logs	One-To-Many	User Generated	content, timestamps, usernames, videos, sounds clips
users	store	Public Message Logs	One-To-Many	User Generated	comments, likes/dislikes, timestamps, usernames
profiles	prefer	Musical Preferences	One-To-Many	User Generated	Genres, instruments, years of experience
COLLABS					
Entity	Relationship Action	Entity	Relationship Type	Origin	Attributes
Collabs	contain	Member Lists	One-To-One	system generated	members, team leads, usernames, date joined
Collabs	receive	Jam requests	One-To-Many	User Generated	introduction/message, username, experience
Collabs	display	Group Message Boards	One-To-Many	User Generated	posts, usernames, dates, videos, events,
Collabs	contain	Group Description	One-To-One	User Generated	team icon, biography, music preferences
Collabs	maintain	Group calendar	One-To-One	User Generated	Member Availability, Rehearsal Times, Reminders
COMMUNITIES					
Entity	Relationship Action	Entity	Relationship Type	Origin	Attributes
communities	contain	Community Profile	One-To-One	User Generated	Profile image, biography/about me
communities	display	Gallery	One-To-One	User Generated	Videos, Images, Sound Bites
communities	contain	Member List	One-To-One	system generated	member usernames, Maintainers, Owners, date joined
communities	allow	Maintainer Privileges	One-To-Many	system generated	ban/unban privileges, add/remove content privileges, Member promotion privileges
communities	display	Public Message Board	One-To-One	User Generated	Posts, timestamps, likes/dislikes, events, videos, images
communities	prefer	Musical Preferences	One-To-Many	User Generated	genres, instruments

Relationship Charts

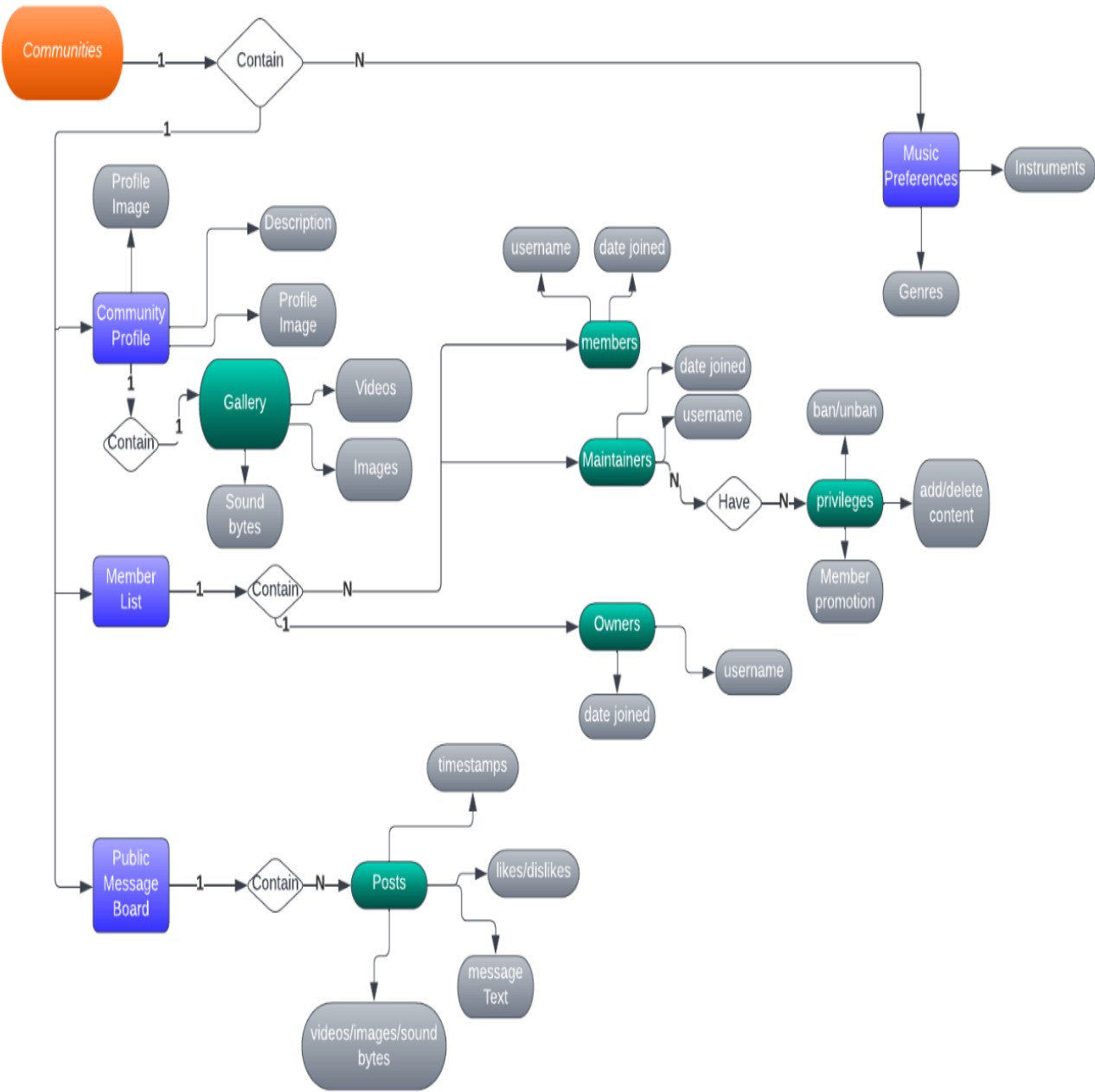
#1 Users



#2 Communities

SWE5003 - Group Project - Deliverable 2 - Relationship Diagram -  
Communites

Ryan O'Conner, Tyler Moore,Benjamin Huus | March 27, 2022



#3 Collabs

SWE5003 - Group Project - Deliverable 2 - Relationship Diagram - Teams

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