# App: Swave (pronounced “sc-wave”) Developer: Todd Gavin

## App definition statement

* Swave is a surfing application that connects fellow surfers with one another to go surfing. Swave matches surfers with similar preferences and location, checks the surf forecast, and creates an event to go surfing with one another with a specific date, time, and location.

## Key Features

* **Sign In / Sign Up Experience**
* **User Profile with Surfing Preferences**
* **Surf User Matching System**
  + Matches users to go surfing with one another based on 2 criteria:
    - Surfing preferences
    - Location proximity
* **Surf Event Creation** 
  + Once surf users have been matched with one another, they select a surf spot to go surfing together
* **Surfer Density Map with Statuses**
  + Using MapKit, a surfer can set their status to “surfing” and see a density map of where people are surfing based on their location.

## User Profile

Target audience could include gender, age range, interests, etc.

* Age Range: 15 – 30
* Interests: Surfing and Water Sports
* Gender: Men and Women (mostly men though)
* Beginner surfers and people who want to make new friends while surfing OR who don’t enjoy surfing alone

## Technology Items

* 2 Third-party API / web service / REST service
  + Magic Seaweed (MSW) Surf API
    - Get current information on surf and surf forecasting
  + Firebase
    - Store user profiles, login information, and surf preferences
    - Store surf user matches and event information
* 2 Apple Frameworks
  + Core Location / MapKit
    - Show
  + EventKit
    - Create an event to go surfing that includes, date, time, location, information and participants.

## Wireframes

**User flow:**

* User Profile
  + Profile Picture
  + Personal Information
    - Username
    - Name
    - Short Bio
  + Surfing Preferences
    - Skill Level: Beginner, Intermediate, Advanced
    - Primary Board Type: Shortboard, Longboard, Foamboard
  + Primary Location
  + Status
    - Open to Surf
    - Surfing Today
    - Surfing Next Week
* Matching and Event System

1. Click to initiate Surfer Matching
2. Matched Profiles: User to User
3. Click to confirm match (once match confirmed, move to next step)
4. Matched Event: Paired Users to Date/Time (Based on the average location and predictive surf report)
5. Event Summary:
   1. Matched Users
   2. Date and Time
   3. Location displayed with MapKit
   4. Surf Report for specific Date and Time (MSW API)
6. Create Calendar event using EventKit

**Other Ideas:**

* Surfer Density Map
  + Set Status
* Surf Forecasting
  + Current and Future Surf Reports

Graphical user interface, application

Description automatically generated