# Project Contract - G.T.H.C

**Game Tenting Help Center (GTHC)**

## Overall Goals and Feature Scope

The Game Tenting Help Center will serve as the forefront to Krzyzewski-Ville's centralized communication. Not only will it provide tools for scheduling tenter shifts for busy Duke students, but it will also provide a central application accessible to all students who intend to take on the challenge of getting into the Duke-Carolina game.

## Design Goals

The core features of the first edition of the application include a schedule builder, push notifications, and proper user authentication. The schedule builder is the most essential part of the application and will require the most amount of time to build and iterate on. The features of the scheduler include weekly shift availability updates, member schedule viewer, shift tagging system, and general user availability info. The notification portion of the application is integral and will include push notifications that provide tenter's information on upcoming shifts, drop shifts, empty shift, announcements from Duke Basketball/Line Monitors, and tent checks.

The notification implementation will require technical expertise especially from the backend side. The third main feature is implementing a proper user authentication using Google's Auth API, using Duke's User Auth API, or by developing our own. This portion of the application will be easily changeable in the future. The level of expertise needed to program this portion of the application is all dependant on the platform we choose and what the client chooses to adhere to. We have brainstormed other features such as Alarm Clock push notification/call feature that will alert tenters during Night Checks. From the data collected, tenters inability to wake-up during night checks is one of the crucial reasons for tents to be ousted from K-Ville. This feature, however, is not an integral feature in the first edition of the application.

Currently the 408 team is looking to add necessary features to enhance the tenting experience. In addition, the application could be used not only for Duke vs UNC, but for other white tenting and walk-up line related activities. The client will need to understand how to broaden the user base of this application to students attending games at Duke.

## Impact

The users of this app will primarily include white, blue, and black tenters. Our target audience are white tenters and first time blue/black tenters.

In order to capture the tenters experience with managing and scheduling shifts, Vinit ran a survey. First he calculated the overall difficulty in scheduling and adhering to shift times. From a scale of 1 to 5, the difficulty level is a 2.67. This seemed underwhelming, until Vinit realized most of the responses were either 1s or 4s. There were rarely any 2s or 3s within the mix. Different kinds of tenters had vastly different levels of experience. The next question was a short answer question about scheduling. The responses show that the current tenters use Google Drive to manage, organize, and assign shifts. I asked tenters about their experience with using google sheets and their willingness to possibly move to another system. Many tenters seemed content with the current process. Interviews had said, “Google sheets worked fine” and “No, our method is effective”. However, tenters did explain concerns with the current method. Most of the concerns centralized around time, efficiency, and coordinating last minute changes. Some tenters explained an application that “offered reminders for when people have to be in the tent” would be useful. Many schedule builders explained that “ making the schedule was the most difficult part trying to make everyone happy”. The current method does make it difficult to maintain equitable hours within the tent. We did receive wary responses such as “Yes I would like a new method, BUT ONLY IF IT HAD A SIMPLE, USABLE UI AND UX. Something that integrates the calendar well and shows who is scheduled for what and makes it easy to request shift changes. However, I would definitely not use the app if it didn't look professionally made and wasn't intuitive to use, because Google sheets still works well enough.”

From the data accumulated, it is clear that scheduling can be improved, but it will require more interviews and design iterations to understand how we can improve it. As our team mentioned before, the most common concerns regarding scheduling centralized around managing time, efficiency, and coordinating last minute changes. The app scheduling portion can hopefully address some of these issues. For instance, the addition of team schedules being placed in the app can help people determine who to contact to coordinate last minute changes. The addition of tagging and notification will allow for a more efficient, cleaner way of scheduling a shift and knowing when your shift is approaching. By making this process accessible from mobile devices, it will make it much more convenient for students to be able to look at their times and upcoming information for their tent.

While we do need more research, we expect to have a working mobile and web application that users can effectively use during tenting. When we understand the core, right features that are needed to make this app a success, we have the potential to affect 1,200 students a day in K-Ville.

## Dependencies

We are depending on Google's servers to fetch and update our data. We are not dependant on Duke Basketball for anything. We are dependent on the Line Monitors to help us develop proper focus groups. Most portions of the application will require some experience in developing REACT and REACT native applications. Most of the features described above will be using REACT packages that already have semi-built frameworks.

## Concerns

Concerns that the client has expressed is mainly about the safety of personal information. Our team wants to ensure the safety of the site and tenter's personal information by keeping a log of anyone accessing any kind of information. User authentication will be necessary to even utilize the application and that will provide another layer of security as well.

## Team Organization

Our team of three intends to take on numerous individual responsibilities ranging from technical work to the much needed logistics of the process. Vinit will take on the role of liaison to Duke Basketball, reaching out to users and working with focus groups, and work on the mobile portion of the application. Rikki will be responsible for being the liaison to the Line Monitors, be in charge of handling any 408 logistics such as documents and meeting requirements, and work on the web portion of the application linking it to the current KVilleNation website which he is in charge of for the Line Monitors. Aman will take on the responsibilities of the overall application itself, the backend requirements it may need, and guide each mobile/web team on what is to come next in building the application.