

CS486C – Senior Capstone Design in Computer Science

Project Description

Missions and Madness Adventure Game Mobile App



Morgan Boatman
Winter Communication, LLC
2225 N Gemini Dr Suite E2
Flagstaff, AZ 86001
MWBoatman@gmail.com
928-853-5438
www.missionsandmadness.com

Project Overview:

Exercise is crucial to health, but it's dumb. How do we get people to exercise? The answer is to "gamify" it. For years, that's exactly what **Missions and Madness** has done, but we've hit a brick wall. Now it's time to take exercise, team-building, cooperation, and situational awareness training to the next level!



Fitness is fundamental to human life, yet it is undermined by the modern world in general and by "screens" specifically. How can a mobile app – that depends on a screen – combat this pervasive problem? By utilizing and applying

technology carefully, innovatively, and appropriately in conjunction with an engaging, fun, and empowering activity, participants can be trained to **partner** with "screens" and what they represent rather than rely on and be handicapped by them.



The extensive existing **Missions and Madness** material and established style will guide the functionality, look, and feel of the app.

Missions and Madness mobile app development team will need to be able to read and comprehend the existing material and translate it into the necessary interactive digital procedural format. To that end,

I recommend the team play a game of **Missions and Madness** early in the process.



The **Missions and Madness** experience has proven to empower individuals and groups, and it therefore has the potential to change the world. Fundamental fitness, the skills to cooperate, and engagement with one's surroundings are essential skills of civilization. **Missions and Madness** teaches, provides opportunities to experience, and hones these critical skills.

Features:

The App must present the game procedure to the participants in sequence.

It must randomly select some of the game variables.

“Black-Out” mode during Movements.

Demonstrative video clips for activities.

The App should have a choice to randomly trigger “Contact” alerts with selectable frequency.

It must keep track of the time it takes for participants to complete portions of the game.

The App will conform to the established style of existing materials and content.

The App interface must be clear and as accessible as possible.
The App must operate outdoors.

Stretch Goals:

Eventually, the App must have GPS functionality, participant roster capabilities, and difficulty level adjustments.

The App must eventually have the ability to adapt to day/night conditions, number and ability of participants, and Area of Operation type.

Eventually, a step/calorie counter will be necessary.

The App will eventually auto select Objectives of historical or cultural significance in novel Areas of Operation.

As Mission categories and special editions are expanded, the App should integrate these. In the future, social media and community integration will be necessary.

Knowledge, skills, and expertise required for this project:

The development team should be able to build an interactive Mobile App for android and apple that functions as described. An interest in game design, fitness, and mapping would be great.

Equipment Requirements:

No unusual equipment or development software should be necessary.
Samples of all existing game materials will be provided.

Software and other Deliverables:

The App in a testable beta state as described above is the only deliverable.

Please take a moment to view this Highlights video on our YouTube channel:

