EVY Risk & Reminder Version 1.0

(Designed and Prototype Implemented by Kera Z. Watkins)

1. Introduction

Mile Two has developed software called VYE for a device that can help detect brain injuries through eye movement. This technology is very applicable to the sports world where Mild Traumatic Brain Injuries (MTBIs) (also known as concussions) can be commonplace. Even one concussion can result in compromising one's current and future health.

According to the NFL Players' Association, the average career of an NFL player is 3.3 years. An NFL player has at least a **25%** chance of getting a concussion during that time. Unfortunately, this statistic only accounts for reported injuries, so the chance may actually be significantly higher. During that time, a player may experience at least one concussion. Adequate time is required to recover from a concussion before playing again.

Statistics show that even though players who have already had concussions in a previous year make up only a little more than **15%** of all players experiencing concussions in a given year, their injuries account for almost **40%** of all the concussions for that year. The longest career for an NFL player is 23 years. For this length of time, a player has over **87%** chance of suffering repeated concussions. Alarming statistics such as these show that the repeated use of VYE is essential to help detect undisclosed injuries in a cost-effective way.

EVY attempts to go a step further by showing that VYE is important for both future concussions, as well as the first occurrence of a concussion. This suggests that routine use of VYE and EVY, especially after the first detection, is vital to help prevent additional injuries by pinpointing the need for timely diagnosis and adequate recovery time.

Personas for EVY

- 1. *NFL League* American professional football league that works to maximize profits and minimize costs.
- 2. *NFL Players' Association* provides a platform to represent and reflect the needs of NFL players.
- 3. *NFL Football Coach* maximize chances of winning games based on the configuration of the team and other factors.
- 4. *NFL Sports Medicine Professional* treats injured NFL players and provides preventative care.
- 5. *NFL Football Player* maximizes success to stay on the team, while minimizing impact on future quality of life.

Epic Stories for EVY

The NFL along with the NFL Players' Association, coaches, and medical staff are taking a more vested interest in mitigating risk of repeated concussions for the players, so that concussive impacts on lives are lessened and future healthcare costs are kept lower.

- **E1.** As the NFL Players' Association, we want players to know their risks for experiencing a concussion, so that they can make informed decisions to maximize both their career success, as well as be cognizant of their risk to injuries while a part of the NFL. (Priority: 1, Expected Time: Low)
- **E2.** As a sports medicine professional for football, I want to make sure concussed players are routinely tested for concussions so that the have adequate recovery time to minimize impacts to their future health. (Priority: 3, Expected Time: Low)
- **E3.** As a football coach, balance recovery time for concussed players, individual positions' time on the field, along with increasing our chances of winning a game, so that we can maximize our chances of a win while decreasing the chance for repeated injuries. (Priority: 5, Expected Time: High)

User Stories for Epic Story E1

- **E1.** As the NFL Players' Association, we want players to know their risks for experiencing a concussion, so that they can make informed decisions to maximize both their career success, as well as be cognizant of their risk to injuries while a part of the NFL. (Priority: 1, Expected Time: Low)
- **E1U1.** NFL Players' Association can provide a risk visualization mobile app to players.
- **E1U2.** NFL Players' Association can allow players to visualize recommended time to routinely see a doctor concerning concussions to help provided repeated recovery time.
- **E1U3.** NFL Players' Association can allow players to visualize risk of getting a concussion as time progresses, so they have a way to stay informed of their risks.

Prototype for EVY

The wireframe in Illustration 1 was created with MockPlus software.

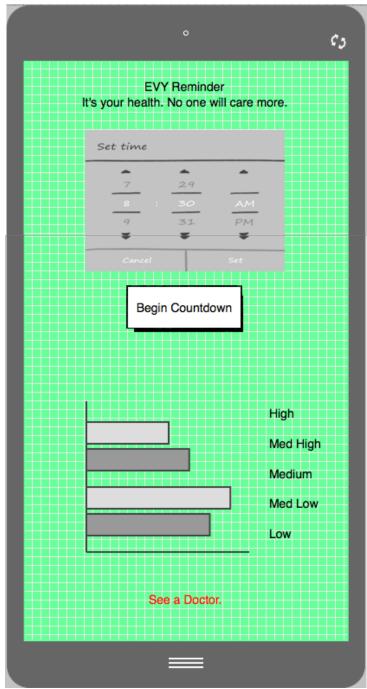


Illustration 1: Wireframe for EVY Football Player User Story

Prototype of EVY Football Player User Story

Designed on MacBook Pro macOS Sierra 10.12.5 using Xcode Version 8.3.3 (8E3004b) for iPhone 7.

