* **Introduction:**
* The purpose of this project is to find out what high school track and field athletes have the potential to become All-Americans at the Division Three level in college. To find out what high school athletes have this potential you first must find the current and past All-Americans' high school times/marks. This kind of data is hard to find and requires me to build a dataset of my own to find these times/marks. I am using TFRSS to find who were All-Americans and what their college personal bests were for the given event. Athletic.net is the website that is being used to find the high school times of the All-Americans.
* **Motivation:**
* The motivation behind this project is to help the head coach of the Track & Field team at UWRF, Mr. Andrew Eggerth. As a former athlete of the UWRF Track team this project is a great way of supporting the future of the team. This All-American project will help Mr. Eggerth in recruiting to help recruit All-American caliper athletes to the UWRF Track team. In turn this will help the team to become more competitive in the WIAC and on the national level.
* **Project Details:**
* **Environment:**
  + As previously mentioned, I will be using R to conduct my analysis of my data. R is one of the best resources to visualize and do statistical analysis on data. I plan to analyze the states, high school times/marks, and college personal bests to find useful information for recruiting.
  + I will analyze the heptathlon and decathlon each on their own and will give each their own dataset. I will analyze the states, high school times/marks, and college bests, as I am for the other events, but I will also be analyzing what events the multis did in high school to see if that has effect.
* **Issues and Challenges for Implementation:**
  + **Data Collection**
    - Names of All-Americans can be different than what is listed on TRSS or have common names that make it hard to find the correct high schooler. To help correct this I find the athlete’s college bio and find what high school and town they are from to find the correct high schooler. Not all high schoolers are found on Athletic.net, as some are from outside the U.S. where it is not common to find them on Athletic.net.
  + **Vering High School Events**
    - Different states have different events, for an example of this is the 300m Hurdles. In most states high schools run 300 meter Hurdles, but in states like Iowa or Massachusetts they do not have a 300m Hurdle event but instead 400m Hurdles. The solution to these problems is to look for a website that can convert these times to times that match the event I need. Taking the 400m hurdle times and converting them to an estimated 300m hurdle time.
  + **Time and Feet**
    - Making your own dataset can be hard to use once in R. The data set might cause a problem while programming in R due to the times not being recognized as times in R. This may also happen as well with feet and will not be able to analyze the data if this happens. To correct this the feet should be put in a decimal form and the time should match the format R uses for time.
* **Deliverables:**
* When the project is completed, it will answer who is an All-American caliper athlete at the Division Three level in college. It will give insight into the improvement All-Americans have since high school, which states produce All-Americans, what events done in high school lead to a better multi, and what times/marks are a good base to recruit All-Americans at.
* The different phases of this project will be shown with the expansion of the data set and the changes of the dataset to make it more usable in R. With the data all collected the addition of code with show the next phase of the project. The project will be finished in the form of a paper.
* **Conclusion:**
* In conclusion this project aims to help build a dataset to analyze what high schools have the potential to become All-Americans at the Division Three level in college. This project aims to help the head coach of UWRF Track & Field team with recruiting knowledge. This knowledge will help raise the standard of UWRF Track & Field.
* **Resources:**
* <https://www.athletic.net>
* <https://www.tfrrs.org>