

Griffin Gowdey

Systems Requirements

Tarrant County College Baseball - Video and Information Website

ITSE 1450

Spring 2021

The problem that I am solving is the lack of a complete software solution for amateur baseball organizations. Technology use and data collection has been increasing rapidly in baseball. It is now more important than ever that teams have all their information in one easy to access place and in a clear or digestible format. Amateur (all levels below professional/MLB/MiLB) baseball teams currently use many different devices, applications, and websites to conduct their operations and each area of these operations involves the use of one or more of these. These operational areas include, but are not limited to recruiting, communication between team members and coaches, strength and conditioning, video collection and dissemination, data collection and dissemination, and scouting. The informational streams of all the applications, websites, and devices start to pile up and it becomes increasingly difficult to manage everything. The solution to manage this usually involves hiring more people or resources, which leads to an increase in spending. This creates a disadvantage for teams on a budget as software developers are usually expensive and student/graduate assistants can only go so far.

My solution to this problem is to create a singular website or application that has all the features and information streams necessary for an amateur baseball program to perform their job duties as efficient as possible and to the best of their ability. It would also be able to integrate into the information system infrastructure of any interested third parties. Specifically, it would be for the scouting departments of MLB organizations and third-party scouting services. The list of elements that must be included in this project include all relevant baseball technology and the people to operate them, people to input rosters, game schedule, and video information, and technical and/or instructional support to teach the platform to new users. This project idea and its individual components were found through my past work experiences in baseball. I have worked

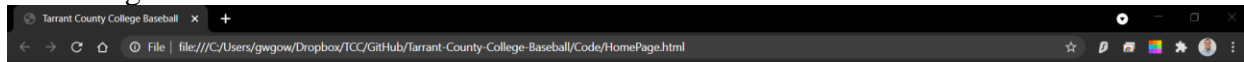
several positions at both the amateur and professional baseball level. I have seen their inefficiencies with informational flows and identified the missing solutions to fix them.

My recommendation is to continue developing from the code scaffolding I have provided. This project has the potential to be very influential in the baseball community, but more software developers are needed to complete it. The benefit of the company to creating this software is that it will be the first of its kind and fill a very large informational gap in the amateur baseball community. It has the potential to be very popular, influential, and meaningful in the baseball world. Most amateur baseball organizations do not have the means to keep up with all the emerging technology and data sources in baseball, so it is important that someone creates a product that is easily deployable.

I anticipate needing two software developers to work with me and a year of time to complete this project. I also would need access to a couple of high-speed/slow motion cameras, a TrackMan unit, and a HawkEye unit. I would also need a cloud storage solution such as Azure, AWS, or Google Cloud. Salaries, baseball technology, and cloud infrastructure would cost around \$200,000 over the course of the year. Planned/future enhancements include machine learning and predictive analysis on team datasets and computer vision applications for video clips.

My solution is best because it is an all-in-one solution to the multiple information inefficiencies in amateur baseball. It provides all the information a baseball staff needs to complete their work efficiently and effectively. One easily accessible and digestible platform to serve all working needs of the program. I want to be the gold standard and industry leader of baseball video and information platforms.

# Home Page



## Tarrant County College Baseball - Video and Information Website



Click on a box to access that section.

**Public Access** is available to everyone. It contains basic statistics, some advanced metrics, and video highlights.

**Private Login** is for people who have requested an account from us. If you're a scout, coach, team representative, or third-party service who would like access to the **Private Login**, then you can request access by clicking the **Request Private Login** box.

**Staff Login** is only for TCC Baseball personnel.

**Recruitment Login** is for any player that is interested in joining the program. Every potential recruit must create a login and complete an application.

**API Documentation** is for any development group that wants to integrate our software into their system.

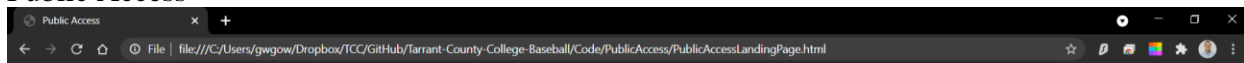
This website is maintained by Griffin Gowdey. Email [griffin.gowdey@ny.tccd.edu](mailto:griffin.gowdey@ny.tccd.edu) if you have any other questions.

[Griffin's GitHub - github.com/gwgowdey](#)

[Source Code - github.com/gwgowdey/Tarrant-County-College-Baseball](#)



# Public Access



## Tarrant County College Baseball - Video and Information Website

### Public Access



Click on a box to access that section.

**Roster/Player Profiles** contains individual and team basic statistics, some advanced metrics, and video highlights from both past and present players.

**Game Schedules** contains past and present game schedules and results.

**Game Video** contains a searchable log of all multi-angle regular speed video from both home and away games.

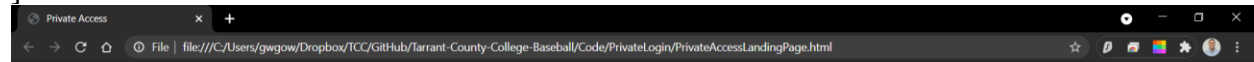
**Video - Live Stream** contains live video feeds of various angles from both limited practice sessions and home games.

**TrackMan - Live Stream** is a live data stream of TCC's TrackMan stadium unit from both limited practice sessions and home games.

**Hawk-Eye - Live Stream** is a live data stream of TCC's Hawk-Eye stadium unit from both limited practice sessions and home games.



## Private Access



### Tarrant County College Baseball - Video and Information Website

#### Private Access



Click on a box to access that section.

**Roster/Player Profiles** contains individual and team statistics, all advanced metrics, and video highlights from both past and present players.

**Game Schedules** contains past and present game schedules and results.

**Game Video** contains a searchable log of all multi-angle regular and high-speed speed video from both home and away games.

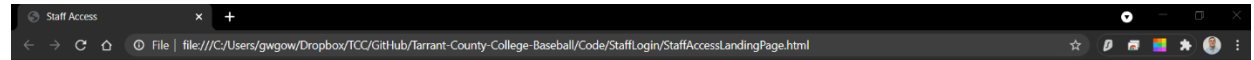
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## Staff Access



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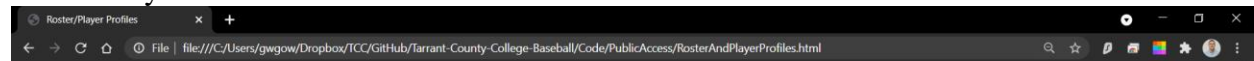
#### Staff Access



Click on a box to access that section.



## Roster/Player Profiles



### Tarrant County College Baseball - Video and Information Website

#### Roster/Player Profiles



Select a roster year: **2021**

FirstName, LastName #1



Primary Position: RHP Secondary Position: None

Bat Right, Throw: Right

Height: 6-0, Weight: 200 lbs.

Major: Computer Science, College Year: Freshman

Hometown: Fort Worth, TX, High School: R.L. Paschal

High School Graduation Year: 2020, Projected College Graduation Year: 2024

#### TrackMan - College Accuracy

Pitch Classification Release Speed Vertical Release Angle Horizontal Release Angle Spin Rate Spin Axis Tilt Release Height Release Side Extension Vertical Break Induced Vertical Break Horizontal Break Plate Location Height Zone Speed Vertical Approach Angle Horizontal Approach Angle Zone Time

#### Video Highlights

Date	Game or Practice	Pitch Type	Regular or High-Speed	Video Clip
5/6/2021	Practice	Curveball	High-Speed	