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## Executive Report

### Our App

After generating our predictions and tinkering with our model, the final step of our project was to find a valuable way to display our findings. We wanted something that was easy to use but also far beyond simply publishing our final dataframe online. Ultimately, we hoped our final deliverable would mimic a baseball card, where the user would be able to view basic information about each player, including our future predictions. Although we collectively had little experience with it, we decided to try to build a Shiny application, as we could develop and run the application in R where the remainder of our code was. Fortunately, it was relatively easy to get our dataframe of predictions to display in the app, as well as menus which allow the user to subset to a specific player or team. After this basic functionality, we began to brainstorm and implement many other features that boosted the usability and value of the app. We were able to scrape biographical information and a picture of every player from FanGraphs and mlb.com, and easily put these objects onto the player pages of the app. Additionally, we displayed graphs that showed past and predicted xFIP values to the player and team pages. One of the most interesting features that we added to the app was an xFIP calculator, where the user can plug in values and our model will give predictions for future xFIP based on the inputted variables. Ultimately, developing our Shiny app was a very smooth process. The seamless integration that it provides with R enabled us to easily upload our dataframes and create interesting graphs without having to build a website from the ground up. We are all extremely pleased with how the app turned out from an aesthetic and usability standpoint, and think that people with limited or advanced baseball knowledge can gain valuable information from using it.

Please click the link below to view our app. Enjoy!

<https://malcolmmashig.shinyapps.io/Predicting-MLB-Pitcher-Value/>