



Introduction

- As a member of the Duke Applied Machine Learning Group, I was connected with Birdie (www.birdieworld.com), an ethical tech start-up, in the spring of 2021.
- I had the opportunity to work remotely as Birdie's product management intern. This internship began in March of 2021, and has continued into Fall 2021.

What is Birdie?

- Birdie is a website devoted to solving a modern paradox of choice: deciding what to binge watch in the era of streaming
- Launched in 2016, Birdie recognized that personalized show recommendations from friends and family are far more effective than algorithm-based suggestions
- Birdie has since grown a community of 1000+ users, allowing film buffs to share personalized recommendations and receive suggestions tailored specifically to their tastes

Project Goals

- My main goals for the internship were as follows:
 - Code scripts to automate site maintenance tasks (i.e. updating the movie catalog)
 - Utilize "growth hacking" techniques to artificially expand site content before launch
 - Define customer segments and develop a go-to-market strategy

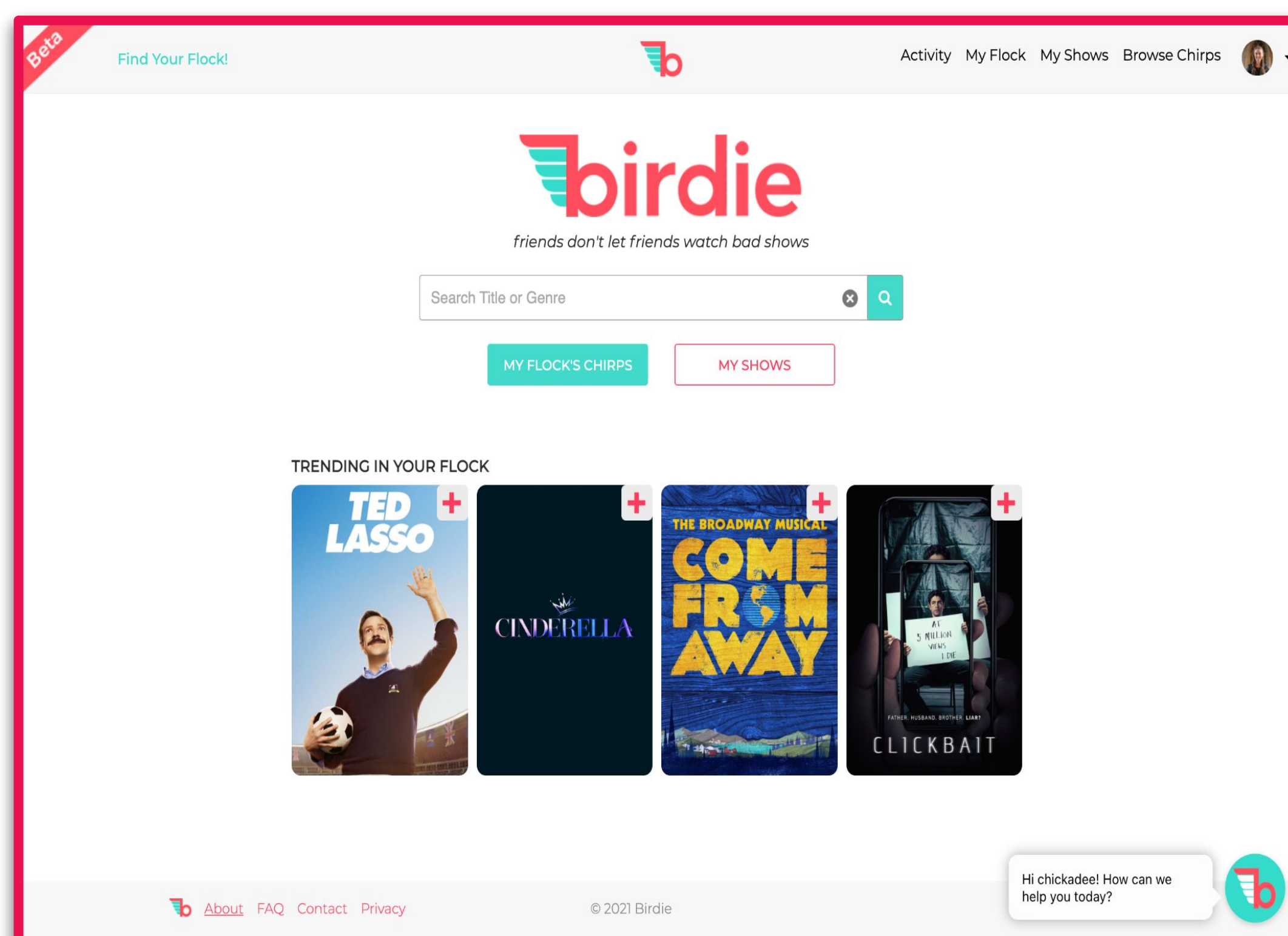


Figure 1: A Screenshot of Birdie's Homepage

Project Outcomes

Site Automation

- *Successfully coded a robust pipeline to approve shows that were missing from the Birdie catalog
 - Built skills in python coding and webscraping, including selenium webdriver, HTML parsing, and Git.

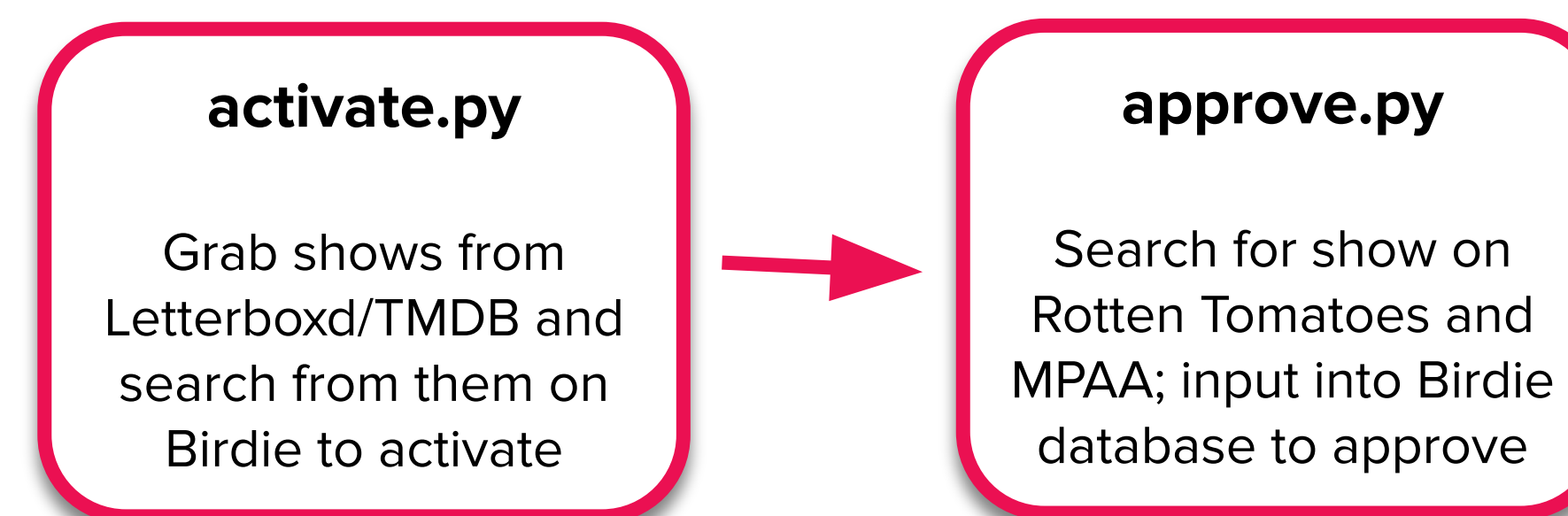


Figure 2: Automation Schematic

Growth Hacking

- Developed a python-based web-scraping algorithm to grab reviews off of Rotten Tomatoes and Letterboxd and then upload them to Birdie
- Contacted 200+ critics, filmmakers, and comedians to access reviewed content
- Developed SQL queries to track the growth in content over time
- Grew the number of shows reviewed on Birdie by 110% in 2 months

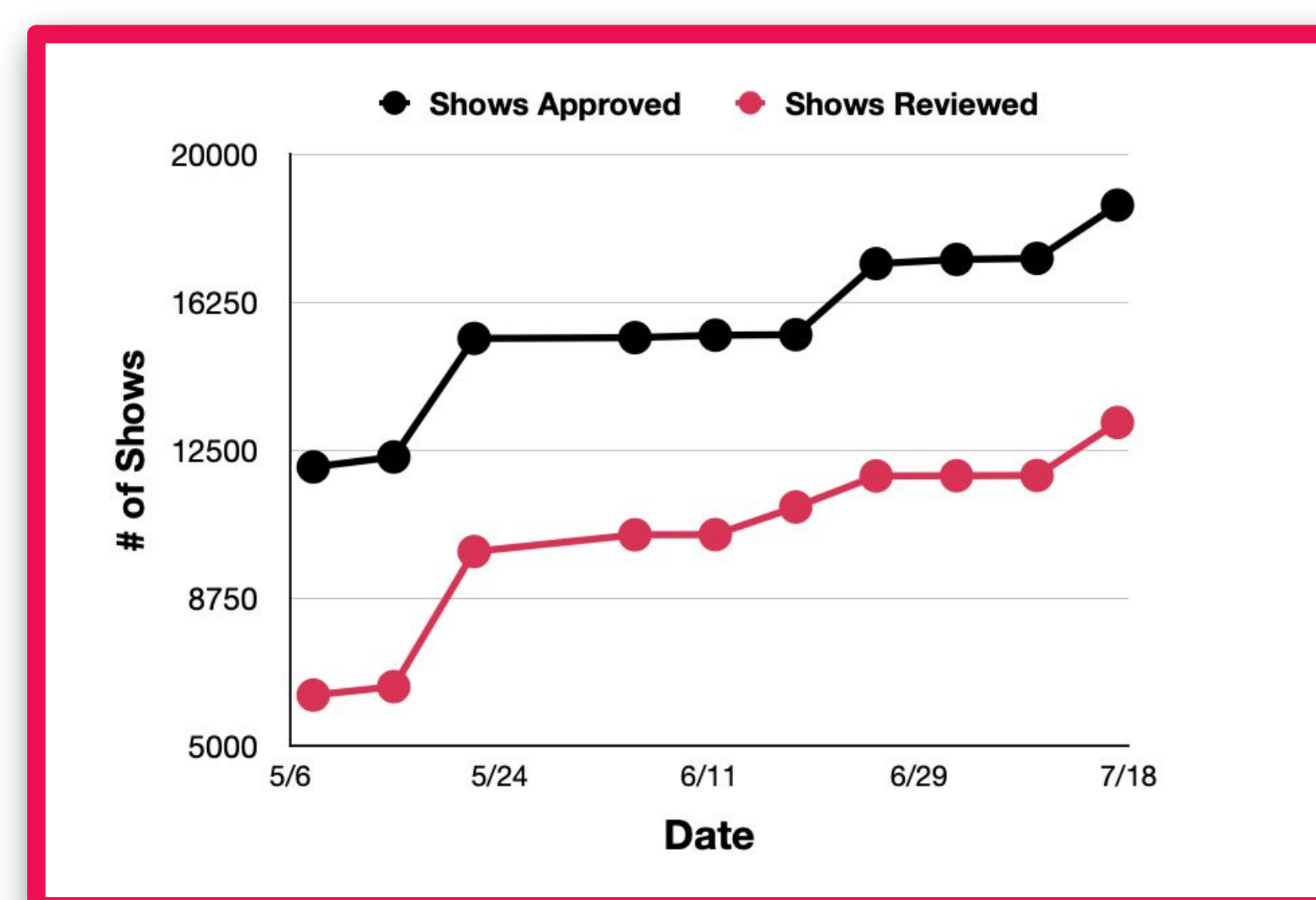


Figure 3: Site Growth

GTM Strategy

- Researched and began outreach in the movie recommendation market
 - Contacted 50+ film-related clubs and classes at colleges to gauge interest in Birdie
 - Collected information on grants and PR opportunities
 - Created a pitch deck for a potential partnership with a dating app
 - Began a customer acquisition initiative in movie recommendation groups on Facebook and Reddit

*Like all success stories...

I failed a lot! In fact, I failed so gloriously that my errors were arguably more complex and impressive than my successes:

- My code works with The Movie Database (TMDB), a database of EVERY movie EVER made
- Did you know that pornography falls into the category of EVERY movie EVER made?
- Well, I did not!
- So, I unknowingly approved 1000+ pornographic films to be prominently featured on Birdie
- And a bunch of fun movie titles showed up on the site's home screen:

18080 Shaving Ryan's Privates 2002 movie

- A Silver Lining: I created the first ever porn recommendation website!

Takeaways

Skills Built

- Python/SQL/HTML/Command Line/Git/Docker/Metabase
- Product Management/Jira/Agile Prototyping/QA Testing
- Resiliency! Specifically, the patience to identify and delete 1000s of pornos

Conclusion

Start-ups are very fast paced and require you to be a versatile worker. I was able to grow my software engineering and interpersonal skills, and I loved dipping my toes into the different areas of product management. I am looking forward to continuing my work with Birdie this Fall!

Acknowledgements

- Lauren Rosenthal, Birdie Founder and CEO
- Caleb Pope, Birdie Lead Software Engineer
- Duke Applied Machine Learning
- Duke Office of University Scholars and Fellows
- Angier B. Duke Memorial Scholarship