



# **D&D Beyond: Random NPC Generator**

Brion Gahl  
Prem Rana  
Caleb Rapsilber



# GENERAL BACKGROUND

**D&D**  
**BEYOND**

DND BEYOND . COM

## NATIVE GEEK

*Medium humanoid (Reader), any alignment*

**Armor Class** 10

**Hit Points** 22 (5d8)

**Speed** 30 ft.

STR	DEX	CON	INT	WIS	CHA
10 (+0)	10 (+0)	10 (+0)	18 (+4)	10 (+0)	10 (+0)

**Senses** passive Perception 10

**Languages** —

**Challenge** 1 (200 XP)



## Dungeons & Dragons



Created in 1974



Tabletop RPG (Role-playing game)



Acquired by Wizards of the Coast (WoTC) in 1997



## PC (playable character)



Customized by player



Full character info



Trackable resources, background, etc.



## NPC (non-playable character)



Static text block



Limited info



Stats, Actions, Creature Type



## D&D Beyond (dndbeyond.com / DDB)



Digital toolset / game companion for D&D 5th edition



Licensed with WoTC for all SourceText



Subdivision of Fandom Inc. (pop-culture company)

# MOTIVATION

- ❑ Interests
  - ❑ D&D, Learn, Collaborate
- ❑ NPC information static text only
- ❑ Conversion to character sheet model
  - ❑ Interactive
    - ❑ Trackable resources
    - ❑ Dice rolls
    - ❑ Hideable UI features
- ❑ Importing characters into NPCs
- ❑ Create random or custom NPCs

The screenshot displays a detailed character sheet for 'Belbin Tealeaf', a Male Loxuden Halfling Ranger 2. The interface is organized into several sections:

- Header:** Includes the 'D&D BEYOND' logo, a search bar, and navigation links like 'Collections', 'Game Rules', 'Sources', 'Tools', 'Marketplace', 'Media', 'Forums', 'New Player Guide', and 'Subscribe'.
- Character Info:** Shows the character's name, class, level, and a 'CAMPAIGN: Forgotten Realms I' dropdown.
- Ability Scores:** A grid showing Strength (-1), Dexterity (+4), Constitution (+3), Intelligence (+1), Wisdom (+4), and Charisma (+1).
- Skills:** A list of skills with bonuses: DEX Acrobatics (+4), WIS Animal Handling (+4), INT Arcana (+1), STR Athletics (+1), CHA Deception (+1), INT History (+1), CHA Intimidation (+1), INT Investigation (+1), WIS Medicine (+4), INT Nature (+3), WIS Perception (+8), CHA Performance (+1), CHA Persuasion (+3), INT Religion (+1), DEX Sleight of Hand (+4), DEX Stealth (+4), and WIS Survival (+4).
- Combat Stats:** Initiative (+4), Armor Class (16), and Hit Points (22 / 22).
- Weapons & Armor:** Lists 'Light Armor, Medium Armor, Shields' and 'Marital Weapons, Simple Weapons'.
- Actions:** A section for 'Attacks per Action: 1' showing 'Shortbow' (Ranged Weapon) with a range of 80 (220), a hit bonus of +6, and damage of 1d6+4. It also lists 'Shortsword' (Melee Weapon) with a range of 5 ft. reach, a hit bonus of +6, and damage of 1d6+4.
- Spells:** A section for 'Spells' showing 'Ensnaring Strike' (1st).
- Reactions:** A section for 'Reactions' showing 'Opportunity Attack'.



# PROJECT SUMMARY

## ❑ Key Figures

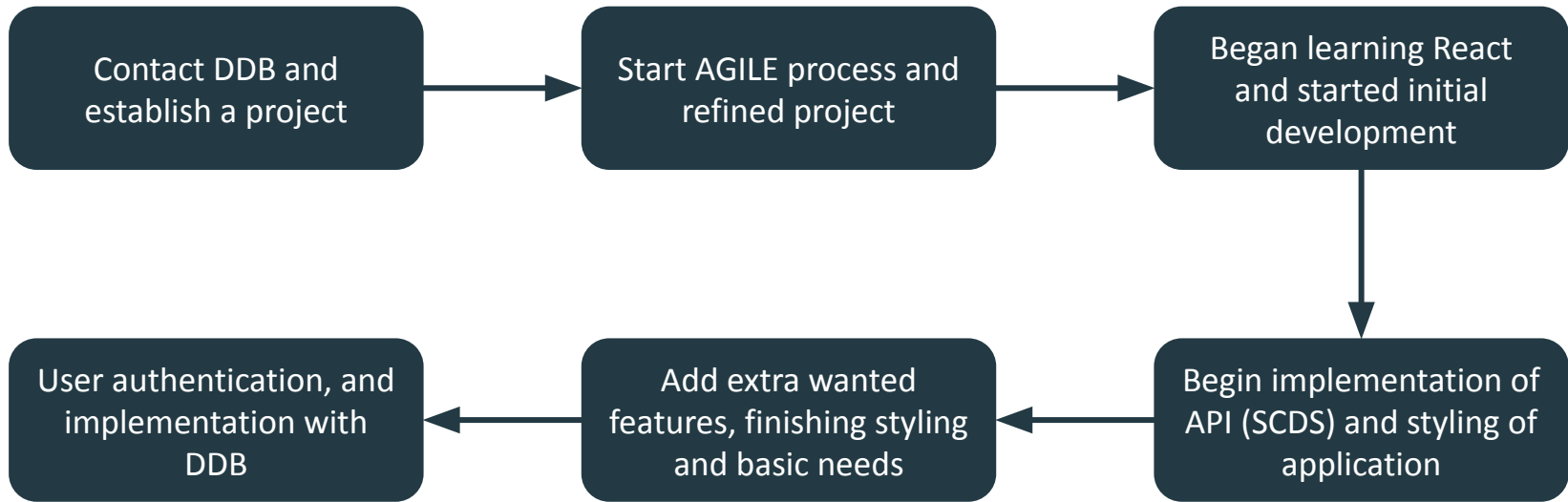
- ❑ Patrick Backmann (Project Manager)
- ❑ Jason Bush (Software Engineer)
- ❑ Ben Dixon (Backend Software Engineer)

## ❑ NPC generator

- ❑ Importing of characters to NPCs or Randomly generating a NPC
- ❑ NPC collections
- ❑ All D&D source data as well as character / NPC data

## ❑ Workload Distribution

- ❑ Prem: Backend / Database / Flask
- ❑ Brion: NPC Builders & Sheets / React Implementation / Backend
- ❑ Caleb: Design / Styling / NPC Builders & Sheets



## ACTION PLAN SUMMARY

# FINAL SPECS






## Features:

- ✓ Interface with DDB APIs
- ✓ Importing Characters
- ✓ Random Generation of NPC
- ✓ Display data in a hybrid-styled NPC Sheet
- ✓ Store imported characters, attached to users



## Built on:

-  React Stack
-  Python Web-Server
-  SQLite Database



# DESIGN PROCESS

## ❏ End User

### ❏ Familiarity

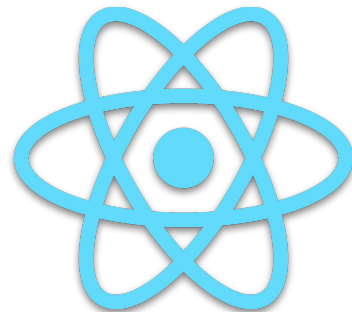
- ❏ Layout, Interactions, Styling

### ❏ Functionality

- ❏ Focus on GMs
- ❏ Use cases: Importing, Random, Scalability, Accessibility

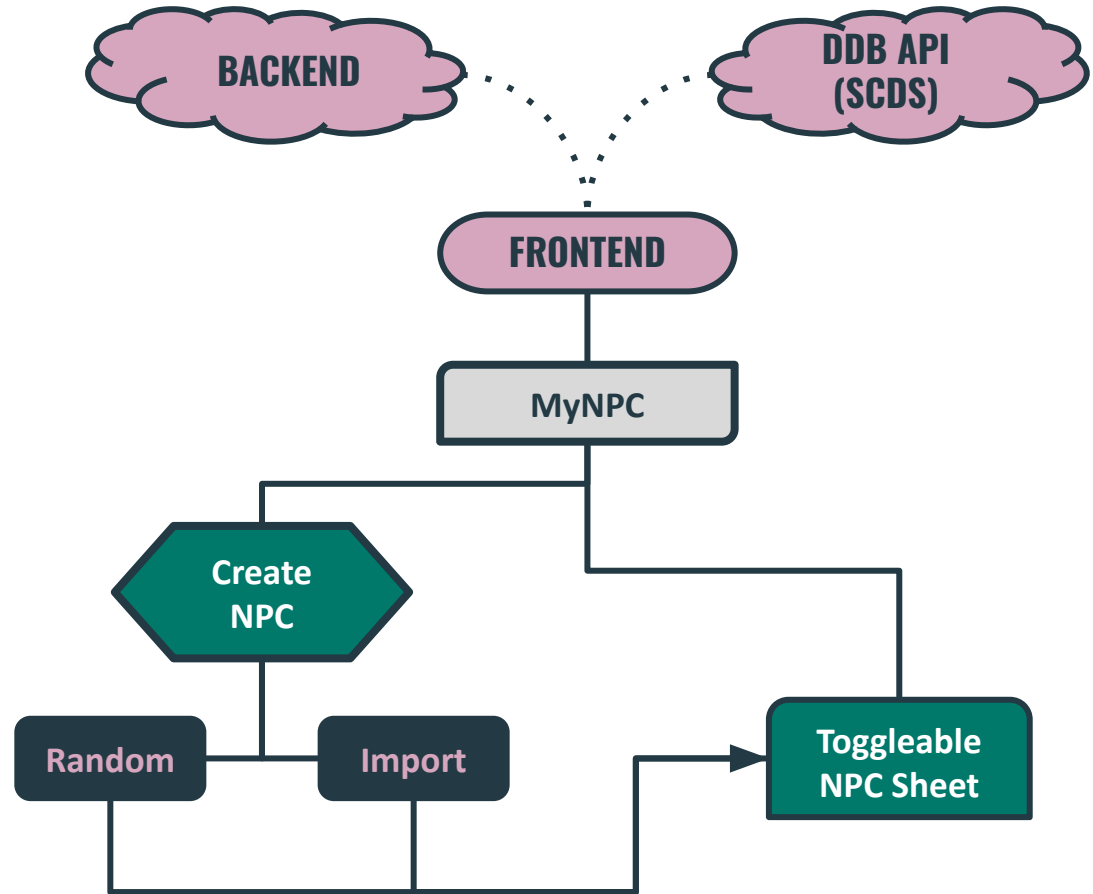
## ❏ Guidance from Pat

- ❏ Most impactful problem to user, not solution
- ❏ Multiple use cases
- ❏ Expansion (like a lego kit)





# PROJECT ARCHITECTURE



# PROGRESS SINCE MILESTONE TWO

## Frontend

- ❑ Working NPC Collections Page
- ❑ Large amount of styling and UI/UX work on all pages
- ❑ Frontend bug fixes and stability improvements

## Backend

- ❑ Finalized database model
- ❑ Finalized endpoints that interface with database
- ❑ Backend bug fixes and stability improvements

# SEMESTER ONE

## SEPTEMBER

Met with the D&D  
Beyond team to develop  
initial idea for the project

## NOVEMBER

Developed Design Specs  
and created initial AGILE  
board to identify scope

## OCTOBER

Refined project idea,  
initiated AGILE process for  
the project

# SEMESTER TWO

## FEBRUARY

Laid foundation and initial specs of React App

## APRIL

Finalize extra specs and styling, push to staging

## DECEMBER / JANUARY

Focused the project design and began development

## MARCH

Finished implementation of API and NPC generation

**D&D BEYOND HAS BEEN  
ACQUIRED BY HASBRO!**





**DEMO**