Team:

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Category:

Interactive player tool.

Theme:

Al as Player Assistant. Similar to a tutorial system, our tool aims to teach players about the available item choices while aiming to be efficient with the limited number of items you can equip.

Overview:

This project is a tool for Diablo 3 that would allow a player to input a set of skills and from that generate a set of items that uses all available item slots and has unique legendary powers that complement the provided skills as much as possible. This would allow a player with non-expert knowledge of items available for their character to formulate a goal for items they could search for that enhances a set of skills they enjoy using while maximizing the utility of each item slot.

Novelty:

Most planners for Diablo 3 are focused on a player providing a list of items and skills and determining the effectiveness of the item statistics on those skills. For example taking a set of gear and listing what the effective DPS/damage/uptime is for each of the skills listed. This requires the player to either have knowledge of the items they would like to apply to a specific skill build or have already acquired gear and they would like to see the effectiveness. All a manual process, sometimes even requiring looking through item databases for specific items for those without knowledge of the available items for their chosen character class. This tool would be unlikely to find the most efficient combination of skills and items that eventually turn into the metagame for each season of Diablo 3, but instead would focus on allowing casual players who have preferred skills that suit their playstyle to find items that on the whole complement their choice of skills and hopefully be able to find the most effective gear for that set of abilities using the unique legendary powers as a guide.

Value:

The players of Diablo 3 are the intended audience. As mentioned above, it's unlikely that the tool on its own would be able to come up with builds and gear that comprises the metagame of each Diablo 3 season, but it is certainly something that could be used to aid in that search, allowing players to adjust skills and search through the gear that really helps particular builds shine. And even outside of the top end leaderboard chasing metagame, there are people who

just play Diablo 3 and have certain abilities they enjoy and just want to find the items that best suit those abilities. In fact, the idea for this tool came about from a discussion about how some abilities are really fun to use, but we don't know which items have the greatest impact on those skills unless those skills are part of the top end builds that comprise the metagame.

Technology:

We have nailed down a data source for the items that should suit our purposes in the form of an open source project used for other Diablo 3 related purposes (repository link: https://github.com/benstepp/d3sim). We intend to integrate with the Blizzard created skill calculator since the information and interface contained there are more than what we could create to support this tool within the time allotted. We're targeting Javascript and HTML so that if the tool is successful, it can be easily shared with the Diablo 3 community.

Breakdown:

All of our project pieces will exist on the client, but there are a couple distinct parts:

- The interface for retrieving skill information (using the battle.net skill calculator)
- A gear search algorithm that searches through items and returns a list of items relevant to the given skills for each character slot
- A constraint solver that determines the most effective combination of the items from the list returned