

All of these methods were utilized with a HashSet which has best case time complexity of:

HashSet	Best
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O(1)	add
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O(1)	getMatch
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O(1)	remove
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HashSet	Worst
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O(n)	add
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O(n)	getMatch
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O(n)	remove
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These time complexities, worst case related to a situation in which the whole array needs to be indexed over in order to find/remove/add/getMatch the requisite element (e.g. initially hashes to index 3 in a last of 5, has to go through indices 3,4,5,0,1,2 before it sees 2 has element/is null for adding element).

The following methods use the “add” method and have the above time complexity:

setAbilityScore, addSkill

The following methods use the “getMatch” method and have the above time complexity:

getAbilityScore, getAbilityModifier(uses getAbilityScore), checkAbility (uses getAbilityModifier), getSkillRanks, getRelatedAbility

Use both “add” and “getMatch”:

setSkillRanks(just additive n, not multiplicative)

getSkillModifier(additive n from calls to getSkillRanks and getAbilityModifier)

checkSkill(uses getSkillModifier)