1. Website fetches user data
2. User chooses “Alike” or “Opposite” then presses “Search”
3. User can choose which attributes to search for
4. Algorithm searches for suitable matches
    For each attribute, calculate the difference and add to the sum
    If user chose “Alike”:
        Want the least sum as possible
    if user chose “Opposite”:
        Want the most sum as possible
    If there is only one other user:
        Display Percentage: Danny: abs((100(traitSum/maxSum)-opposite)), where opposite is 0 or 1
5. Algorithm rates confidence of match and includes this information when the matches appear(percentage)
6. Favorite function? To save a candidate for different comparison later (copy profile details into array or arrayList(is there one in javascript?))

Process: >>>>>>>
User1 goes on the website: match me with someone ! >u<
User1 have : attribute A (score: 3), B (score: 4),C (score 2),

Website: *checks User2’s attributes*
User2 have: attribute A, B, C
Website: *Recommend this User2 (if the scores “match”)*

```
var MAX_ATTRIBUTE_SCORE = 4;
var ALLOWED_VARIANCE = 70;
var HUNDRED_PERCENT = 100;
var findSimilarPartner = false;
var percentage = 0;

userOneInfo = [];


function findDif() {
    findSimilarPartner = false;
    localStorage.setItem("findSimilarPartner", findSimilarPartner);
```

```
}

function findSame() {
	findSimilarPartner = true;
	localStorage.setItem("findSimilarPartner", findSimilarPartner);
}


function report() {

	var arr = document.getElementsByName("type");

	arr.forEach(function(elem){
		if (elem.checked) {
			userOneInfo.push(elem);
		}
	})
	if(localStorage.getItem("findSimilarPartner") == false) {
		percentage = algorithm(userOneInfo, MAX_ATTRIBUTE_SCORE, arr);
	}
	else {
		percentage = HUNDRED_PERCENT - algorithm(userOneInfo,
MAX_ATTRIBUTE_SCORE, arr);
	}

	var matchRating = "";
	if(percentage >= ALLOWED_VARIANCE) {
		matchRating += "You match ";
	}
	else {
		matchRating += "You don't match ";
	}
	matchRating += "with user two based on your preferences by "
	matchRating += percentage;
	matchRating += " percent!";
	document.write(matchRating);
}

// Returns the difference percentage for user one and user two
function algorithm(userOneInfo, maxAttributeScore, arr) {

	var numOfAttributes = userOneInfo.length;
	var difference = 0;
```

```
        // loop through arr to search for the attributes chosen by the user
        for(var i = 0; i < numOfAttributes; i++) {

                var attribute = userOneInfo[i];

                var score1 = userOne[attribute.value].summary.score;
                var score2 = userTwo[attribute.value].summary.score;

                console.log(score1, score2);
                // calculate the difference
                difference += Math.abs(score1 - score2);

        }


        var differencePercentage = difference/(numOfAttributes * maxAttributeScore) *
HUNDRED_PERCENT;
        differencePercentage = parseFloat(Math.round(differencePercentage * 100) /
100).toFixed(2);
        return differencePercentage;
}
```

```
toggle() {
        checkboxes=documents.getElementsByName("type");
        for(var i = 0; i < checkboxes.length; i++) {

        }
}
```