CS 443

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B2 Writeup

**4:** **Potential Collisions**

We used a QuadTree. QuadTrees tend to be highly efficient based on the size of the input, but in turn can be inefficient if you make the trees too deep. We used bounding boxes to determine if an object is inside a leaf of the QuadTree. We additionally used a hashset to ensure that we only proceeded to narrow phase at most once per pair of objects.

**7: Extra Credit**

1. We implemented a QuadTree from scratch and use it for our broad-phase analysis. Additionally, we made sure to make the height of the tree a variable. You can change it and see how it effects things.
2. We did not do this.
3. This works.
4. We did not do this.