CS 480 Group Project Pitch

Team Members:

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App Details:

What kind of app are you developing (story, game, simulation, other)?

Make sure you consult the requirements based on your application type!

Game

Describe your application and its goals:

Include details such as the narrative, how the user would interact, what would be fun about it, etc.

Basically, this is your main "elevator pitch". Try to sell me on your project idea (like Shark Tank).

We plan to create a game that allows the user to throw items (such as spears, knives, bow & arrow) at targets. The game will have varying levels of difficulty and ways to play (such as timed sessions, score based sessions, etc). The main type of interactions we will be leveraging for this is more advanced physics interactions that will allow the user to throw objects and have those objects interact in a realistic way with the user's motion and targets for maximum immersion in the game world.

Why do you want to make this?

Interactions with objects in VR is one of the greatest strengths of VR in our opinion. The feeling of picking up an object and manipulating it in a way that feels realistic is extremely fun. Also, using spears, knives, or bows and arrows can be both dangerous and expensive to do in real life. Being able to use them in VR eliminates the danger and cost.

Why should this be in VR instead of on a traditional screen? Convince me.

Hint: You should *also* consider the DICE principles in your answer.

It should be in VR because it will provide an immersive experience to throw the objects with realistic gestures instead of just pressing a button or buttons to throw objects.

Technical Details:

What specific area of technical merit are you planning to explore?

Motion / Hand Gesture Recognition / Physics Interactions

Why do you want to focus on this area?

In order to provide an immersive experience for the user when throwing objects
The realistic feeling that the throwable objects give is probably the best application in VR games that we have so far. The heaviness, the physics and good motion and hand gesture recognition make the interaction with objects feel as good as possible for the user, and throwing stuff is a thing that everyone can do without having to think about the navigation and UI issues in game

How does your area of technical merit fit in with your overall app?

Tracking the user's hands or motions will give the app a more realistic feel when playing. The app is focused around throwing objects so having motion recognition and physics interactions go hand in hand with thrown objects. An example of this would be tracking how fast the user's hands are moving when they let go of an object in order to give the object a realistic speed when it flies.

Any questions, concerns, or comments?

This will help me find/develop resources for your team's project: tutorials, in-class activities, etc.

Any resources pointing towards how to implement physics of a thrown object would be helpful.
Also resources for tracking hand motion for object (spear, ax, and knife) throwing.