This practical combines two common animation exercises, occasionally used as employment tests - the "bouncing ball" and the "flour sack" animation. Let me set up the scene for you:

> *A sack of fertilizer sits near a weed in the grass, hunched up against a soccer stadium wall. A soccer ball flies in and hits the sack in the gut with a "poof" and lands a few feet away. The sack lurches forward, looks around, then stands up, and kicks the ball.*

Develop and animate the scene described above. Keep the background of the scene simple and the camera frame very tight, to focus the viewer's attention on the action and story. You can use physics like gravity, soft-bodied dynamics, etc. but don't stop there. Exaggerate motions and deform the fertilizer sack and soccer ball to create realism and emotion. For the sack character, you can use a character rig and/or deformations, keyframes, etc.

Visual quality is paramount, but since rigs and controls add value by making characters easier to reuse in the future, the use of a rig and any custom UI controls you create to operate the rig will count for 100 pts, or 10% of your score.

Here is some interesting background information regarding this practical exercise:

Back in the 1930's, the book *The Illusion of Life*, by the "old men of Disney," Frank Thomas and Ollie Johnston, laid out twelve (12) principles of animation. Much of their work in what was then a fledgling art form is still pertinent today, even in 3D computer-based animation. Some of their principles are paraphrased below.

Staging: The presentation of an idea or "story" so that it is clear to the audience.

Secondary action: Supplemental action in a scene reinforces the primary action for the audience and give the scene greater depth.

Squash and Stretch: Deformations in moving objects and in the body of a character help create realism, by suggesting they have mass and inertia.

Exaggeration: Motions should be believable but exaggerated to create pleasing effects that develop empathy and elicit positive responses from the audience.

Anticipation: Small "trigger" actions help prepare the audience for the major action that is about to occur, and they create the appearance of momentum.

Follow Thru and Overlap: When the main body of an object or character stops, other parts continue to move. Nothing stops all at once. This enforces realism.

Arcs: With few exceptions, objects should follow curved paths, not straight lines. This gives animations a more natural action and better flow.

Appeal: Nothing in the scene should distract from the story, but should enhance the story and be appealing, in an artful way, to the audience.

You'll need to create and submit an animation 15 => 20 seconds long, rendered with 24 frames per second at 1280 by 720 pixel resolution in 16-bit color. In addition, you will need to create and submit three high quality still renderings at a resolution of 1920 by 1080 pixels in true color (24 or 32-bit color depth) to show the quality of your textures and lighting. Lastly, you'll need to take three maximum resolution screen captures, with wire-frames visible, to show your geometry and any character rig and/or custom UI controls. Annotate any rigging and custom controls in the UI that you created on the screen captures. To judge it, we need to see it.

Here are the contest scoring criteria the judges will be using.

Items Evaluated	Possible Points
Background, Staging, Perspective & Camera(s) – Do they work to reinforce the idea and tell a story?	200
Overall Visual Quality & Rendering – Are objects, motions and imagery appealing?	200
Modeling, Deformation & Animation – Do objects have life, weight and inertia? Do characters display recognizable emotion?	200
Textures, Lighting & Particle Effects – Are they artistic and do they add depth to the scene/story?	100
IK/FK Rigging – Was a rig and or custom controls created? If so, how complete and valuable are they for future use?	100
Planning & Teamwork – Did the team use notes, illustrations and/or a storyboard to define and plan their efforts, set key timings and assign major tasks?	100
Written Exam	100
Résumé Penalty	0 or -50 only
Clothing Penalty	0 to -50
Total Possible Points	**1,000**

Thank you and good luck!