# Hero Character specifications

## Model

The character should perform well on a relatively recent mobile device.

Number of polygons: 5K to 7K

Number of bones: 32 to 42 maximum

Blend weights: 2 bones

Single skinned Mesh Renderer

Mecanim Humanoid. There should be no import warnings.

Supports ragdoll with no vertex tearing. Please use Unity naming convention for bones.

Supports look-IK as the head turns to look at interest points (normally this comes for free when doing a well-designed Mecanim character).

Texture size: 2048x2048

Texture types: To be discussed. This depends on whether the art direction decides on Physical Based Rendering or not. As we are in the future, there are definitively some skin elements that will glow or be brighter. So I’m thinking minimally one diffuse and one emission texture.

Number of materials: 3 (Hero body, arm-computer (i.e. the Omni-tool), and clan badge)

**Important**: I’m not an expert in character modeling. Please feel free to make suggestions to these specifications ☺

## Animations

Decide on root motion.

Sharing animations. Core package plus hero-specific packages to reduce build size.

Characters are heroic and have over-the-top animations.

Characters have facial expressions (eyes, smiles, frowns).

The characters have voice lines. Blend shapes should be present to allow lip-sync with Salsa (<https://www.assetstore.unity3d.com/en/#!/content/16944>)

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| --- | --- | --- | --- |
| Animation | Loops | Description | Blends |
| Idle neutral | Yes | All-purpose gentle idle | Can blend to idle 2 or idle 3 or run |
| Idle 2 | Yes | A funny animation that shows the hero’s personality. It plays before the race starts. | Can blend to idle neutral or run |
| Idle 3 |  | A funny animation that shows the hero’s personality. It plays before the race starts. | Can blend to idle 2 or run |
| Victory 1 | No | A cool animation that plays when the hero has won the race. Shows personality and attitude. | Blends to Idle neutral |
| Victory 2 | No | A cool animation that plays when the hero has won the race. Shows personality and attitude. | Blends to Idle neutral |
| Run | Yes | The running animation. It reflects the personality, gender and weight of the hero. | Blends to a whole bunch of animations such as sprint, jump, fall, etc. |
| Sprint |  | A faster run where the player leans more forward. |  |
| Zipline attach | No | Player jumps up a little to grab the zipline | Blends to zipline loop |
| Zipline loop | Yes | Player is going down the zipline | Blends into zipline detach |
| Zipline detach | No | Player lets go of zipline | Blends into fall |
| Use omni-tool 1 | No | Omni-tool is on left arm. Player types a few commands to trigger a card. | Blends to a whole bunch of animations such as sprint, jump, fall, etc. |
| Use omni-tool 2 | No | Omni-tool is on left arm. Player types a few commands to trigger a card. | Blends to a whole bunch of animations such as sprint, jump, fall, etc. |
| Fall start | No | Player starts falling | Blends to fall loop |
| Fall loop | Yes | Fall loop | Blends to land and run (could be interrupted) |
| Land (after fall or jump) | No | Land animation that plays when landing after either falling or jumping | Blends to run or slide |
| Jump |  |  |  |
| Double-jump |  |  |  |
| Slide down | No |  |  |
| Slide loop | Yes |  |  |
| Slide up | No |  |  |
| Death fall backwards | No |  |  |
| Death fall forward | No |  |  |
| Stumble |  |  |  |
| Fly? |  |  |  |
| Land after respawn | No | When a player dies, he respawns in the sky, falls, and lands on the road. The Land-after-respawn animation is a slightly longer animation that shows the hero’s weight and resolve in winning the race. | Blends into run |