

# "Drop Herder"

## Quick Overview/Core Mechanic:

The player will play as either "Sam Shot" or "Pat Pump" to help deliver drops of insulin to various Body Stations in the body. When the player is successful in delivering the insulin, they will learn something new about dealing with diabetes.

## End Goal/Game Objective:

- In "Relax" Mode, the main goal is to deliver insulin to the various Body Stations in the body that need it. There is no lose condition for this mode. It is simply to teach and to relax the player.
- In "Rapid" Mode, the objective is the same, but the player is now challenged to beat a set time and create their own records.

## Game Over:

The only thing the player can lose is their insulin drop due to it being destroyed by various in-body objects. Down time between losses will be kept to a minimum to encourage the player to try again. The player's insulin drop will respawn close to the place they lost it in order to prevent frustration.

## Broad Target Audience:

Kids ages 4-10 recently diagnosed with diabetes. This game should be played with a parent if the child is 4-6 years of age so the parent can reinforce the teachings of the game as well as learn with the child.

## Development Platform/Technology:

This game will be developed for the iPod Touch/iPhone platform. If the player is using a 3rd generation iPod Touch or lesser, they will not be able to take advantage of the photo feature within the game. The experience will be slightly less personal because of this.

## Target Game Length:

30 minutes to 1 hour

## Genre(s):

- Puzzle
- Educational
- Non-violent

## Rating:

If this game were to be released outside of Apple's App Store and rated by the ESRB, we would be striving for an "E for Everyone" rating. If it was to be put into Apple's App Store, the game would strive for a "4+" to "9+" rating.

## Tone/Focus words:

- Personal
- Educational
- Inviting
- Warm
- Adventurous

## Characters:

- **Sam Shot:** Sam Shot is a male or female player avatar. Sam looks like a syringe and will control the drop of insulin via his/her plunger.
- **Pat Pump:** Pat Pump is a male or female player avatar. Pat looks like a control unit for an insulin pump and will control the drop of insulin via the longer portion of his/her avatar.
- **Marty Meter:** Marty Meter appears at various Body Stations throughout the body. Marty Meter will only appear if the player's insulin administration method is a shot. He will let the player know if the particular part of the body they arrive at needs insulin or not. The number on Marty Meter will change based on an area's blood glucose (BG) level.

## Featureset & Mechanics:

- **Personal Touch – Name, Photos, & High and Low Levels:** The player will (with the help of a parent or guardian) be able to enter their own name and if a camera is available on the device, will be able to take a picture of themselves. They will also be able to enter and take pictures of the method of insulin administration. (shot or pump) If a camera is not available, the parent or guardian will be able to select icons to represent the missing pictures. The custom icons will allow the child to associate images with certain words. (e.g., “you”, “pump”, “shot”) Parents will also be able to set “high” and “low” blood glucose levels to educate their child on their own personal high and low blood sugar levels.
- **Varying Play Times:** The game will choose a random number of levels or locations to visit. Each level does not have to be the same or be in a set order. This allows for a fresh play experience every time.
- **Simple Controls:** Even the most novice of players will be able to control this game.
- **Various Modes:**
  - **Relax Mode:** Relax Mode is the main game mode. It is meant to educate in a relaxed atmosphere. The player is not timed in this mode. This mode is meant for players 4-6. The player must deliver insulin drops to various Body Stations throughout their body.
  - **Rapid Mode:** Rapid Mode is the exact same as Relax Mode, but the player is challenged to beat a time record. Special challenge levels are also present. This mode is meant for players 6 and up. Best times for a particular level are kept and used to challenge and reward the player if a record is broken.
  - **Parent Mode:** This mode contains the features listed above in the “Personal Touch” section. This mode will be locked with a 4-digit password. The mode can be unlocked if the parent deems the child responsible/old enough.

- **Mechanics:**

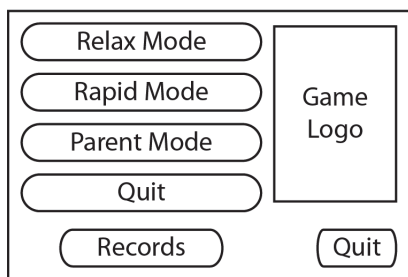
- **Insulin Drops:** Insulin drops are clear drops that the player will control. They must be delivered to Body Stations. The drops will be able to bounce off walls and pass through barriers. A drop will be able to hold one item, such as a key or Body Coin.
- **Body Stations:** Body Stations are the goal for the player. If “shot” was selected, Marty Meter will provide gameplay hints when the player does not go to a Body Station with an insulin drop and diabetes tips when they deliver the insulin drop to the Body Station. If “pump” was selected, Pat Pump will give the same information Marty would give, but on his/her own.
  - **Voice Over:** If time allows during development, the text of Marty Meter, Pat Pump and Sam Shot would be voiced as well as displayed on-screen. If not, parents can always read to their children.
- **Body Coins:** Body Coins will be big, gold coins placed in hard-to-reach or hidden areas within the game. If the player collects them, they can spend the Coins on in-game rewards, such as badges to show off their achievements. Body Coins will also be rewarded if they beat a record during “Rapid” mode.

## Controls:

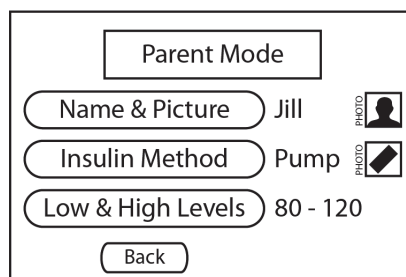
The controls were purposefully made simple so even the most game-novice parents and the youngest of our target audience could understand the game after a few tries.

- **Tap & Drag:** This is the main control mechanism. The player will put their finger on a point that is between the insulin drop and their avatar. They will then slide their finger on the screen to move the insulin drop and their avatar.
- **Flick:** If the player flicks their avatar, the avatar will stay still, but the insulin drop will be pushed in the direction of the flick.
- **Tap & Hold:** The player will be able to attract the insulin drop back to their avatar by tapping and holding on their avatar.

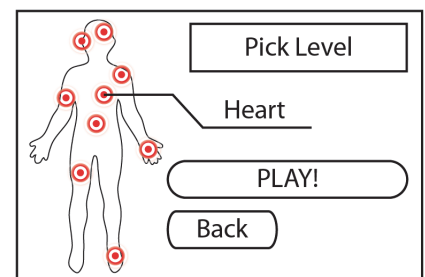
## Mockups:



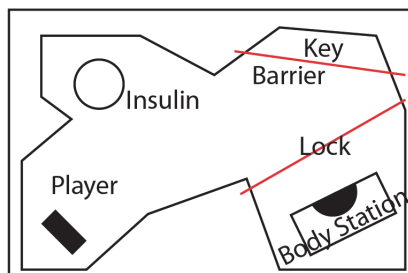
Main Menu



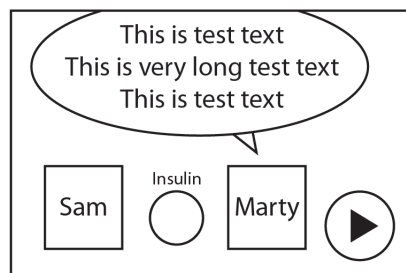
Parent Mode



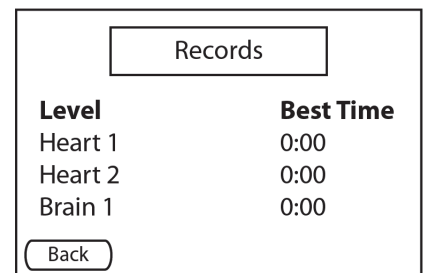
Level Select



Example Level



Win Level



Records

## Explanation of Example Level:

The player must pick up the insulin by going up to it and/or tapping and holding to draw the insulin closer to them. They then must push the drop through a barrier in order to collect a key and unlock the second barrier that is barring entry to the Body Station. Once a level is finished, the player will be able to pick another level.

## Art Style:

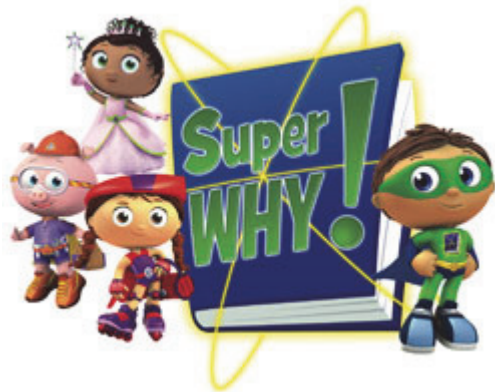
- Bright characters
- Background and foreground (used to hide secret paths, etc.)
- Characters and important items “pop” out from the background/foreground due to differences in color/brightness
- Example:



Reference image: *Rayman Origins*,

[http://www.raymanpc.com/wiki/en/File:RaymanOrigins\\_010.jpg](http://www.raymanpc.com/wiki/en/File:RaymanOrigins_010.jpg)

- Simple gradients/shadows
- Examples:



Reference images: *Super Why!*,

<https://secure.wikimedia.org/wikipedia/en/wiki/File:Superwhylogo.jpg>

[http://www.cpbm.org/files/u26/super-why-boy\\_0.jpg](http://www.cpbm.org/files/u26/super-why-boy_0.jpg)

- Top-down perspective
- Examples:



Reference image: *Wii Fit*, <http://www.gamingupdate.com/screenshots/Wii+Fit>

Reference image: *Spore Origins*,

<http://iphone.iusethis.com/screenshot/iphone/sporeorigins.png>

- Simple dialog screens
- Small amount of text at a time
- Examples:



Reference image: *Star Fox: Assault*,

[http://cubemedia.ign.com/cube/image/article/513/513538/star-fox-2-](http://cubemedia.ign.com/cube/image/article/513/513538/star-fox-2-200405110152183.jpg)

[200405110152183.jpg](http://cubemedia.ign.com/cube/image/article/513/513538/star-fox-2-200405110152183.jpg)



Reference images: *Nintendo 3DS: StreetPass Mii Plaza*,

[http://mediacontent.nintendo-europe.com/NOE/images/3ds\\_content/streetpass-screen-any-mii\\_en.jpg](http://mediacontent.nintendo-europe.com/NOE/images/3ds_content/streetpass-screen-any-mii_en.jpg)

<http://www.flickr.com/photos/steventhompson38/5741646009/sizes/o/in/photostream/>

## **File Management:**

This would depend on company funds. If the company is looking for a free solution, then Bazaar would be used. If a solution is already in place, we would opt to use that solution. If the company does not have a system in place but is looking for a more professional system for file management, I would recommend Perforce. Since we are developing for iPod/iPhone, cross-platform compatibility is important.

## **Scalability of Design:**

This project allows for the amount of levels to be scaled up or down based on the needs of the project. This also allows level "packs" to be added or sold later on as additional content for enthusiast players/fans.

## **Other Ideas:**

- Based on the simplicity of the control scheme, this game could be played as a Flash game or be deployed to other smartphone platforms.
- If a web-based demo were released, it could gain tremendous momentum on Planet D: <http://www.diabetes.org/living-with-diabetes/parents-and-kids/planet-d/>
- Some tips could encourage kids to "Spot the Block!" as part of the advertising campaign in America:  
<http://www.fda.gov/Food/ResourcesForYou/Consumers/KidsTeens/ucm115810.htm>
  - Parents would need to explain to children which number on "The Block" is important to them to avoid confusion.
- Based on how fast or slow a level is solved, the player could be asked to check their blood glucose level to let them know that certain feelings are associated with high and low levels.
  - Instead of being asked to check their blood glucose, Marty or Pat will show high or low readings so players will associate those numbers with specific feelings.
- Depending on which level is solved, the player's winning message could be something about that particular body part and how it's affected when their blood glucose levels are in their correct range, e.g., "When your blood glucose levels are right, you'll be able to think better for that important test!"