

Design Document for:

Family Village

Character Editor



Version: 1.2
Date: 12/27/2010

Table Of Contents

1.0	Overview	3
2.0	Design.....	4
2.1	Options/Choices	4
2.1.1	Face	4
2.1.2	Fashion	4
2.1.3	Info	5
2.2	Colors	5
2.3	Database Setup	5
2.3.1	Character Assets Table (char_type).....	6
2.3.2	Player Purchases Table (player_unlocks)	6
2.3.3	Changes to Existing Tables (villager)	7
2.4	Purchases	8
2.4.1	Direct Purchase	8
2.4.2	Unlock for all	8
2.4.3	Coins and Cash	8
2.5	Future Possibilities	8
2.5.1	Accessories that add bonuses	8
3.0	Mockups.....	9
3.1	Face Category (No Color Choices)	9
3.2	Face Category (Color Choices).....	10
3.3	Hair Sub-Category (Dual Color Choices)	11
3.4	Clothing Sub-Category (Elongated boxes).....	12
3.5	Info Category.....	13
4.0	Asset Organization	14
4.1	Face Asset List	14
4.1.1	Face Shape.....	15
4.1.2	Eyes	15
4.1.3	Eyebrows	15
4.1.4	Noses	16
4.1.5	Mouths	16

- 4.2 Fashion Asset List 16
 - 4.2.1 Clothes..... 16
 - 4.2.2 Hair 18
 - 4.2.3 Facial Hair 19
 - 4.2.4 Accessories 20
- 5.0 Appendix 21
 - 5.1 Version History 21
 - 5.2 Legal Information and Statement of Confidentiality..... 21
 - 5.3 Contact Information 21

1.0 Overview

The character generator for Family Village is one of the primary tools for players to create their family! In addition to being able to organize their family tree and link up relationships, we want the player to be able to make their villagers look like the real life people they are supposed to be. To do this we are creating a robust character editing tool featuring a multitude of choices for clothing, faces, and personal attributes. The editor is divided up into three main categories, and then sub categories within those. The breakdown is as follows:

Face	Fashion	Info
Shape	Clothing	Edit Info Fields
Eyes	Hairstyle (Hats Included)	Voice
Eyebrows	Facial Hair	
Nose	Accessory	
Mouth		

Using these areas of customization we can allow the player to make their villagers come to life, and give room for a lot of future expansion of styles. This includes featured clothing items that can be purchased for Bucks... allowing yet another way for players to monetize! The customization of ones avatar is one of the highest monetized items in similar Facebook games today, and we hope to provide a similar experience in our game with this rich character editor!

The character editor will become much more like the store, in that it will have unlocked items, and premium items. It will have multiple pages of items rather than limiting to eight, and it will allow a broad range of possibilities for each of the players villagers to be starkly different from one another.

To make this happen, character items will be set up more like the store, including their own database for storing purchase prices, and ID numbers. This document will house all the information needed for tracking of these assets. A page will also be added to the large spreadsheet for these items and tracking to keep all the database controls in one place

2.0 Design

2.1 Options/Choices

The Character Editor will be divided into three categories, and those will in turn be subdivided (much like the Store works). Male and Female will have differing options within this layout in some cases, but overall we want it to be very similar between the sexes (just with different items obviously). For any of the categories that allow a color choice, they will default to the first selection upon choosing (00 in the array if you will). For a better explanation on how these options/colors are organized see the Asset Organization section. The sections are divided as follows:

2.1.1 Face

This section includes the items that make up the face type of the villager, and contains the following sub-categories:

- **Face Shape:** This allows you to make your villager appear heavier or thinner by changing the shape of the chin. Options are the same for Male and Female. This category will also feature the color swatch selectors. This color choice will automatically translate to the body skin tone also
- **Eyes:** This is the shape of the eye sockets, and the color of the eyes. These are the same options for Male or Female. The eye shape will be shown, and the same color swatches will be present on the side to choose color
- **Eyebrows:** This is an overlay on the face (as opposed to the other facial changes), and will feature its own color choice to determine what color they are (as opposed to matching the hair). The choices are the same between Male and Female.
- **Nose:** This selects the nose size/shape for the villager. These are the same options for Male or Female.
- **Mouth:** Choose the size/style of your villager's mouth. These options are the same between Male and Female.

2.1.2 Fashion

This section includes the stylistic attributes of the character, and contains the following sub-categories:

- **Clothing:** Clothing is a unique category to the editor in that the choices are given elongated boxes. This allows them to pick a "Style" that is comprised of a top and bottom. This style buttons will have two color pickers down the side to differentiate between the top and bottom colors. This can be seen in the mockups section. Some styles will only have one color choice (dresses, overalls, etc). Choices for this category will differ between male and female.

- **Hair Style:** Choose the style of haircut your villager has. These choices will differ depending on your villager being Male or Female. The hats are also included here. We are treating hats like their own style so that we don't have to worry about the hats being able to fit every style of hair. This allows us to make some of the more non-conventional styles of hair and hat (Mohawks, Pigtails, etc.)
- **Facial Hair:** This option is only available to Males, and will automatically grey out for females. It will feature its own color choice to determine what color they are (as opposed to matching the hair)
- **Accessory:** This is where all the additions to the character will go. Things like glasses, purses, jewelry, and more are all possibilities. They will feature some with color palettes, some without. Males and Females may have separate choices here, still not determined.

2.1.3 Info

Here you can actually edit the Family Tree information of your villager; this will save back to the tree database. You can also change the voice of your character via a selection icon in this section. There are no sub categories here, just the edit screens. See Mockups section for details

2.2 Colors

Some of the items in the editor allow a color choice, for these items a small color picker will be displayed on the side of the choice. If the user clicks the item box the default color (first in list) will be displayed. They can click on any of the color choices on the side to all that color of item to the preview window. Some of the items that will allow color choices are as follows:

- Eyes
- Eyebrows
- Face Shape (Skin Tone)
- Hair/Hat
- Facial Hair
- Clothing (Both Top and Bottom)
- Accessory

What colors are available for any given item is determined on an item to item basis. There is not going to be a set palette with the exception of the hair items. Hair, Facial Hair, and Eyebrows will all use the same color choices, but the user will be able to mix and match them as they see fit.

2.3 Share Villager

2.3.1

2.4 Database Setup

2.4.1 Character Assets Table (char_type)

To make this character generator work like the store, a database will need to be setup similar to the bldg_type table. The fields it will need are as follows:

Field Name	Input Type	Description
id	Integer	The assets ID number, this is what its file name will be as well. That fits the convention already in place I the store for buildings/homes/etc
active	Boolean? (or Integer)	Whether or not an item is active... This will determine if it used in game
in_store	Boolean? (or Integer)	If an item is active in the store or not. Some seasonal items will be active, so that those that have purchased them can continue to wear them, but not be available for purchase in the store
purchase	Boolean? (or Integer)	Is the item purchasable or is it a free to use item, I think most of the premium items will be contained to the fashion categories, but all items will still need this property
kind	Integer	What Kind it is... The prefix to the file name will sort of help determine this, but we can break it down further with this field
name	String	What the item is called... this may or may not show up in the editor buttons... TBD
color	String	What color the asset is. This is mostly for organization purposes and being able to see this info when looking at the large database
gender	Integer (0, 1, 2)	Is the asset for Males only, Females, Only, or unisex
cost_type	Integer	Does the item cost coins or bucks
cost	Integer	How much does the item cost
morale	Integer	Does the villager get a morale boost for wearing the item
lock_level	Integer	What level does the player gain access to the item
sort	Integer	What sort order is the item in the store

2.4.2 Player Purchases Table (player_unlocks)

In addition to getting its own database table, we will need a way to store what items the player has purchased, this will require the creation of another table. This other table will be called player_unlocks and will simply contain a masterID field with the players Facebook ID, and then a field with each of the possible unlockable items as its name. Those fields will store a 1 or 0 for having been purchased or not. Below is a sample of what the table may look like:

masterID	2101200	2202200	7102200	7202100	7106200
791938571	1	0	0	0	0

785222589	0	0	0	1	0
986665885	0	1	1	0	0

2.4.3 Changes to Existing Tables (villager)

Currently each villager is stored in the “villager” table, and all that assets that comprise their look is stored in such. Currently we have the following slots allocated for the assets that comprise their appearance:

- gender (used to determine what “body” to use)
- color_eye
- color_skin
- color_hair
- hat
- facial_hair
- glasses

We need to Change the following fields if possible:

- color_eye → eyeball
- color_skin → body
- color_hair → hair
- glasses → accessory

And also add these new fields:

- clothes_top
- clothes_bot
- head
- eyebrows

With those changes/additions there will be 11 fields that effect the appearance of the character, and 10 that actually store an asset ID number (Gender will still be a 1 or 2, but will affect which body is used). Upon launch of this new character editor all of the fields will need to be reset to defaults, rather than using the 0, 1, 2, 3 conventions for these fields we would like to actually put the asset ID in the field. The table below is an example of what the new fields will be, and what their default setting will be:

gender	body	clothes_bot	clothes_top	eyeball	head
1	1101001	2101201	2101101	3001001	4012222
2	1201001	2201201	2201101	3001001	4012222

eyebrows	facial_hair	hair	hat	accessory
5001001	0	7001101	0	0

5001001	0	7002101	0	0
---------	---	---------	---	---

2.5 Purchases

2.5.1 Direct Purchase

Premium items can be purchased directly in the editor, rather than having to exit to the store. This creates a direct link to purchase and does not hamper the purchase process. We want to make as few barriers to pay as possible. If they do not have enough cash to buy the item, clicking the buy button will take them to the cash purchase interface

2.5.2 Unlock for all

By purchasing the item it will become available for all of the villagers in game, this promotes making many villagers. If you made them purchase for everyone you would have to lower the price, and they still would likely only buy it for themselves. This allows us to have slightly higher prices, and only one table for storing which villager had what (as opposed to adding every possible villager to that table)

2.5.3 Coins and Cash

The latest discussion is that clothing may be bought with coins or cash depending on the item...

2.6 Future Possibilities

This section is just a placeholder for ideas that have been floating around out there... It can be added to or taken away from, but I don't want the discussions lost or forgotten so I am documenting them here

2.6.1 Accessories that add bonuses

We had discussed the possibilities of certain accessories giving bonuses to gameplay. For instance a watch could cut the job time by a certain percent, or something similar...

3.0 Mockups

3.1 Face Category (No Color Choices)



3.2 Face Category (Color Choices)



3.3 Hair Sub-Category (Dual Color Choices)



3.4 Clothing Sub-Category (Elongated boxes)



3.5 Info Category

Admiral Spaceship **FACE** **FASHION** **INFO** X



Full Name

Gender Male Female ? **Living**

Birth Date **Birth Place**

Current Residence

Email Address

Voice

SAVE

4.0 Asset Organization

The assets are organized in a way that we can easily coordinate style with color. This allows a cleaner tracking of renders and prevents the giant list of items simply numbered 1, 2, 3, 4, 5, etc. Each asset is given a 7 digit number, and each digit represents a piece of tracking information. The table to break down what those digits correlate to is below. This table applies to all assets except the Heads. Those have a different array style than other items which is explained in their section.

Array Location	Description	Options
X-0-00-0-00	Type Prefix	1 – Body 2 – Clothing 3 – Eyes 4 – Head 5 – Eyebrows 6 – Facial Hair 7 – Hair/Hat 8 – Accessory
0-X-00-0-00	Gender	0 – Gender Unspecific 1 – Male 2 – Female
0-0-XX-0-00	Style ID	No set options, just starts at 01, and continues with each style getting a new ID
0-0-00-X-00	Type	Varies based on type... Explained in the individual tables
0-0-00-0-XX	Color	No set options, just starts at 01, and continues with each color getting a new ID

Those numbers will comprise what model it actually puts in there. The dashes are provided to show how the numbers break up. In the database the asset would be named 111111.swf for example. Using the tables below you can find the array number for any of the items in game.

4.1 Face Asset List

Faces are done a bit differently; the pieces are put into an array to determine the head model it uses. Each face has a 7 digit number, and each one of the digits correlates to a piece. The numbering is as follows:

Example: 4VVWXYZ

4 = Prefix for Heads (all will have this)

V = Skin Tone (taken from the face shape color selector)

W = Face Shape

X = Eye Shape

Y = Nose Shape

Z = Mouth Shape

Those numbers will comprise what model it actually puts in there. So using the table below you can see that a Light skin, Thin Face, Small eyed, Small Nose, Small Mouth, would be the array 4-01-1-1-1-1 or the file named 40111111.swf. Using the table below you can find the array number for any of the 54 combinations of face attributes. Eyebrows are a separate object that is layered on top, so they are not part of the array, but are still in this "Face" category.

4.1.1 Face Shape

Color choice will automatically choose the body as well, Therefore right below this table I am listing the asset numbers for the body choice


ID	Description	Preview	Colors
4-XX-1-X-X-X	Thin Face		Light(01), Medium(02), Dark(03)
4-XX-2-X-X-X	Regular Face		Light(01), Medium(02), Dark(03)
4-XX-3-X-X-X	Fat Face		Light(01), Medium(02), Dark(03)

ID	Description	Preview	Colors
1-1-01-0-XX	Male Body	N/A	Light(01), Medium(02), Dark(03)
1-2-01-0-XX	Female Body	N/A	Light(01), Medium(02), Dark(03)

4.1.2 Eyes

The shapes will provide color options on the side that will determine eye color, Thus I am including the table to show eye color assets below this

ID	Description	Preview	Colors
4-XX-X-1-X-X	Thin Eyes		Blue(01), Hazel (02), Green(03), Brown(04)
4-XX-X-2-X-X	Regular Eyes		Blue(01), Hazel (02), Green(03), Brown(04)

ID	Description	Preview	Colors
3-0-01-0-XX	Basic Eyes		Blue(01), Hazel (02), Green(03), Brown(04)

4.1.3 Eyebrows

ID	Description	Preview	Colors
5-0-01-0-XX	Small Brow		Blonde(01), Platinum Blonde(02), Brown(03), Dark Brown (04), Red(05), Black(06), Grey(07)
5-0-02-0-XX	Medium Brow		Blonde(01), Platinum Blonde(02), Brown(03), Dark Brown (04), Red(05), Black(06), Grey(07)

5-0-03-0-XX	Large Brow		Blonde(01), Platinum Blonde(02), Brown(03), Dark Brown (04), Red(05), Black(06), Grey(07)
5-0-04-0-XX	Penciled Brows		Blonde(01), Platinum Blonde(02), Brown(03), Dark Brown (04), Red(05), Black(06), Grey(07)

4.1.4 Noses

ID	Description	Preview	Colors
4-XX-X-X-1-X	Small Nose		Controlled by Skin Tone Selection, suffixes will match Body colors...
4-XX-X-X-2-X	Medium Nose		Controlled by Skin Tone Selection, suffixes will match Body colors...
4-XX-X-X-3-X	Big Nose		Controlled by Skin Tone Selection, suffixes will match Body colors...


4.1.5 Mouths








ID	Description	Preview	Colors
4-XX-X-X-X-1	Small Mouth		Controlled by Skin Tone Selection, suffixes will match Body colors...
4-XX-X-X-X-2	Medium Mouth		Controlled by Skin Tone Selection, suffixes will match Body colors...
4-XX-X-X-X-3	Big Mouth		Controlled by Skin Tone Selection, suffixes will match Body colors...

4.2 Fashion Asset List

4.2.1 Clothes





This follows the standard numbering convention and the Type field is used to dictate whether it is a Top (1), Bottom (2), or Onesie (3). Onesies are considered anything that does not have independent top and bottom colors, dresses for instance, or overalls.

ID	Description	Preview	Colors
2-2-01-3-XX	Short Skirt w/ Apron		Top: Purple(01), Blue(02), Green(03), Red(04) Bottom: NA - Single Color

2-2-01-1-XX 2-2-01-2-XX	Silk Skirt and Blouse		Top: Green(01), Blue(02), Grey(03), Pink(04), Purple(05), Yellow(06) Bottom: Tan(01), Blue(02), Taupe(03), Pink(04), Purple(05), Yellow(06)
2-2-02-1-XX 2-2-02-2-XX	Flower Blouse w/ Long Skirt		Top: Pink/Brown(01), Blue/Purple(02), Green/Blue(03), Red/Green(04), Yellow/Green(05), Brown/Green(06) Bottom: Purple(01), Blue(02), Green(03), Red(04), Yellow(05), Orange(06)
2-2-03-1-XX 2-2-03-2-XX	Flowing Gown		Top: Dark Green(01), Purple(02), Light(03) Green(04), Maroon(05), Red(06) Bottom: Dark Green(01), Purple(02), Light(03) Green(04), Maroon(05), Red(06)
2-1-01-1-XX 2-1-01-2-XX	Polo and Jeans		Top: Tan(01), Blue(02), Green(03), Orange(04), Red(05), Yellow(06) Bottom: Blue(01), Dark Blue(02), Black(03)
2-1-02-1-XX 2-1-02-2-XX	Plaid Pants w/ Sweater		Top: Blue(01), Purple(02), Green(03), Orange(04) Bottom: Pink(01), Blue(02), Green(03), Tan(04)
2-1-02-1-XX 2-1-02-2-XX	Suit (Black Belt/Shoe)		Top: Black(01), Blue(02), Green(03), Purple(04), Red(05), Olive(06) Bottom: Black(01), Blue(02), Green(03), Purple(04), Red(05), Olive(06)
2-1-02-1-XX 2-1-02-2-XX	Blazer and Slacks (Brown Belt/Shoe)		Top: Black(01), Blue(02), Green(03), Purple(04), Red(05), Olive(06) Bottom: Black(01), Blue(02), Green(03), Purple(04), Red(05), Olive(06)



4.2.2 Hair

Hair will work somewhat similar to clothing in that by choosing a style, it technically chooses two render layers. The “Hairstyles” (Type 1 based on the naming array) will simply set the hair render layer, and then set the hat render layer to zero. All of these hairstyles are available for both genders. The Hats will be separated out into Male and Female, but when selected, will automatically set the hairstyle underneath as well. Males will get style 7001101, Females get 7002101. The selector icons for these hats will be different a bit also in that the hair color selector will still be on the right, but the hat can change its color on the left (see the mockup for more details). The hats in the table below have the associated default hair listed under their own number for quick reference.

ID	Description	Preview	Colors
7-0-01-1-XX	Short Basic		Blonde(01), Platinum Blonde(02), Brown(03), Dark Brown (04), Red(05), Black(06), Grey(07)
7-0-02-1-XX	Curled		Blonde(01), Platinum Blonde(02), Brown(03), Dark Brown (04), Red(05), Black(06), Grey(07)
7-0-03-1-XX	Straight		Blonde(01), Platinum Blonde(02), Brown(03), Dark Brown (04), Red(05), Black(06), Grey(07)
7-0-04-1-XX	Bun		Blonde(01), Platinum Blonde(02), Brown(03), Dark Brown (04), Red(05), Black(06), Grey(07)
7-0-05-1-XX	Part Left		Blonde(01), Platinum Blonde(02), Brown(03), Dark Brown (04), Red(05), Black(06), Grey(07)
7-0-06-1-XX	Part Right		Blonde(01), Platinum Blonde(02), Brown(03), Dark Brown (04), Red(05), Black(06), Grey(07)
7-0-07-1-XX	Ponytail		Blonde(01), Platinum Blonde(02), Brown(03), Dark Brown (04), Red(05), Black(06), Grey(07)
7-0-08-1-XX	Pig Tails		Blonde(01), Platinum Blonde(02), Brown(03), Dark Brown (04), Red(05), Black(06), Grey(07)
7-0-09-1-XX	Bald (No Hair)		N/A

7-2-01-2-XX (7-0-02-1-01)	Bow Hat		Hair: Same Palette as Above Hat: Pink(01), Blue(02), Green(03), Orange(04), Red(05), Yellow(06)
7-2-02-2-XX (7-0-02-1-01)	Flower Beanie (Automatically adds hair 7-0-02-1-01 underneath)		Hair: Same Palette as Above Hat: Green(01), Blue(02), Grey(03), Pink(04), Purple(05), Yellow(06)
7-1-03-2-XX (7-0-01-1-01)	Bowler Hat		Hair: Same Palette as Above Hat: Grey(01), Blue(02), Green(03), Orange(04), Purple(05), Red(06)
7-1-04-2-XX (7-0-01-1-01)	Top Hat		Hair: Same Palette as Above Hat: Grey(01), Blue(02), Green(03), Orange(04), Purple(05), Red(06)
7-1-05-2-XX (7-0-01-1-01)	Newsie Cap		Hair: Same Palette as Above Hat: Grey(01), Blue(02), Green(03), Purple(04), Red(05), Yellow(06)
7-1-06-2-XX (7-0-01-1-01)	Baseball Cap		Hair: Same Palette as Above Hat: Blue/Tan(01), Red/Black(02), Yellow/Navy(03), Grey/Blue(04), Red/Blue(05), White/Blue(06), Yellow/Green(07)
7-2-07-2-XX (7-0-02-1-01)	Derby Hat		Hair: Same Palette as Above Hat: Yellow(01),

4.2.3 Facial Hair

ID	Description	Preview	Colors
6-1-01-0-XX	Bushy Mustache		Blonde(01), Platinum Blonde(02), Brown(03), Dark Brown (04), Red(05), Black(06), Grey(07)
6-1-02-0-XX	Chinstrap Beard		Blonde(01), Platinum Blonde(02), Brown(03), Dark Brown (04), Red(05), Black(06), Grey(07)
6-1-03-0-XX	Sideburns		Blonde(01), Platinum Blonde(02),

			Brown(03), Dark Brown (04), Red(05), Black(06), Grey(07)
--	--	--	--

4.2.4 Accessories

ID	Description	Preview	Colors
8-0-01-0-XX	Reading Glasses		Plain (01)

5.0 Appendix

5.1 Version History

Version #	Changes By	Change Description
1.0	Bret Wardle	First Version, set up skeleton and basic info fill in
1.1	Bret Wardle	Changed categories and such based on meeting that took place 12/14. Lots of changes to doc
1.2	Bret Wardle	Flesh out, more details, adding more styles/colors to the asset lists

5.2 Legal Information and Statement of Confidentiality

This document is the sole property of Alpine Studios. All rights reserved. Copyright © 2010/2011.

This document contains unpublished information that is confidential and proprietary to Alpine Studios. It is supplied for internal purposes only, and shall not be duplicated nor disclosed without prior written permission from an authorized representative of Alpine Studios. This document shall not be released to any third party without a valid non-disclosure agreement signed by the third party and an authorized Alpine Studios representative. In accepting this document, the recipient agrees to make every reasonable effort to prevent the unauthorized use of this information.

5.3 Contact Information

Bret Wardle
801-671-949
Bret@BretWardle.com