

*House of Blue Beans*

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BITQUID

2014

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Akil  
Manish



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# Main Features

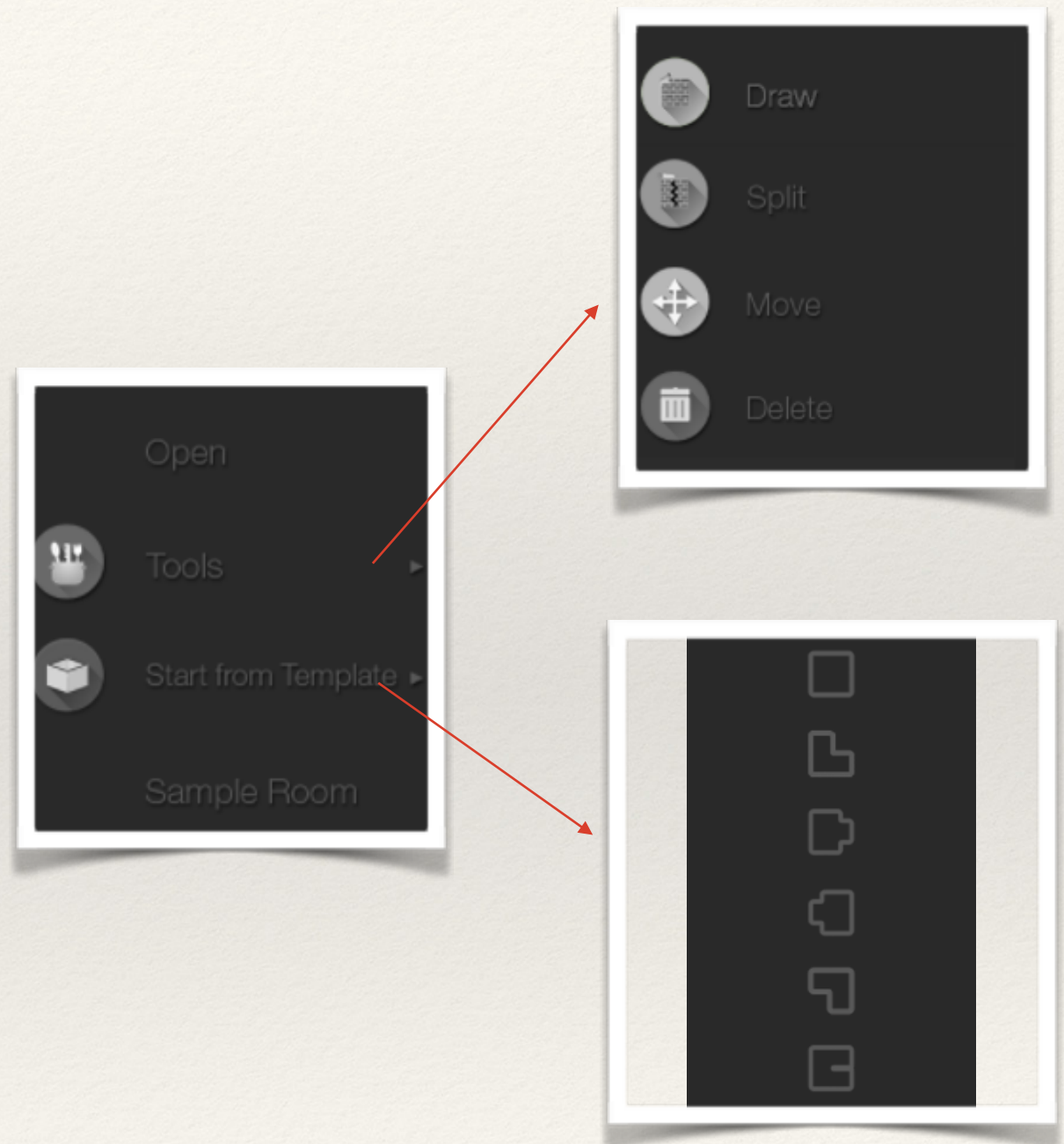
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- ❖ **Build** - Draw , Split, Move , Delete, Templates
- ❖ **View modes** - 2D, 3D , Walkthrough
- ❖ **Furnish** - Drag and drop Assets from the server
- ❖ **Accounts** - Sign up / Login using email or Facebook
- ❖ **E-commerce** - Add items to cart and buy.



# Build

- ❖ Menu - > Build -> gives us two main options.
- ❖ Tools and Template.
- ❖ Tools:
  - ❖ Draw : drag for drawing walls.
  - ❖ Split: click on a wall to split it into two
  - ❖ Move: drag on a wall / corner to move it.
  - ❖ Delete: click on a wall / corner to delete it.
- ❖ Template: DRAG and DROP whichever room design into the grid.





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# Build

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- ❖ Known Issues / Bugs :
  - ❖ Cursors have been put on hold because it needs to be added along with the UI \*
  - ❖ Drawing walls have now been restricted to more than 1 unit. Less than 1 unit walls will be deleted by default because we were getting bugs in the last build.
  - ❖ Floor generation is a very processor heavy operation. So that has a few bugs when it flips / disappears on creation or while splitting walls.

\*UI needs to be re-designed and re-implemented



# View Modes

## ❖ 2D : (click)

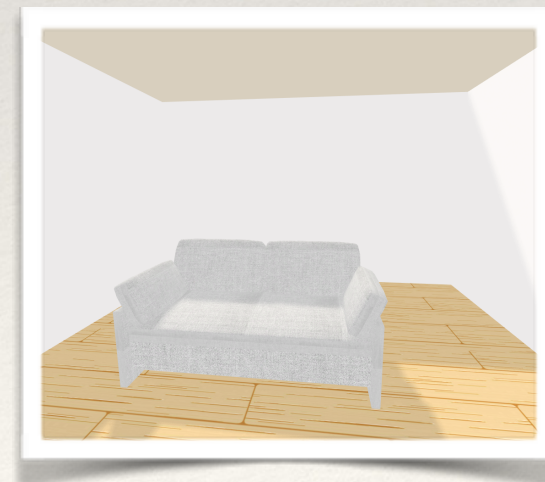
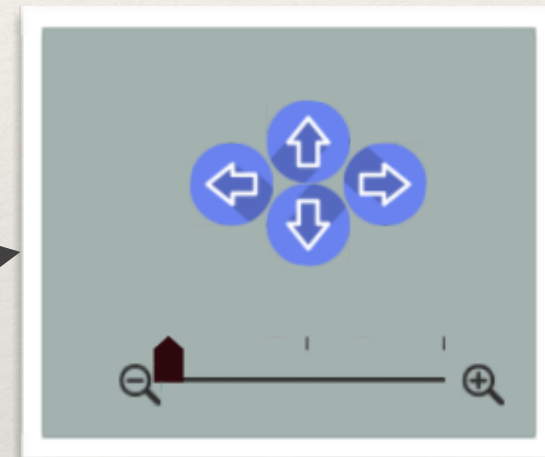
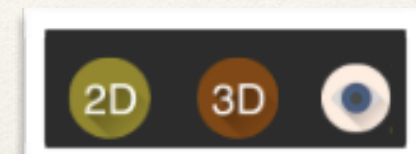
- ❖ Basic mode to build. Top view. User can Pan around the scene by holding down right mouse button and moving.

## ❖ 3D : (click)

- ❖ A view where user can see 360 degree view of the current scene.
- ❖ Left-click mouse drag to rotate around.
- ❖ Wall turns semi-transparent at low angles to let the user view the objects inside.
- ❖ On-screen arrows to pan and zoom. Or use mouse scroll to zoom and arrow keys to pan.

## ❖ Walkthrough : (click on icon and click on the place on the room where you want to start the experience from)

- ❖ Move around the house using W,A,S,D or Arrow keys.
- ❖ Rotate/ Look around using left-click mouse drag.
- ❖ User can move around anywhere inside the walls of the current room and can go through the doors.
- ❖ This mode is just for *previewing* right now. Cannot create /edit any of the existing things in the scene.



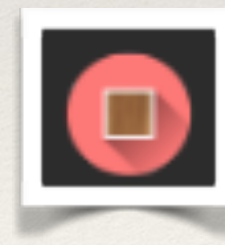
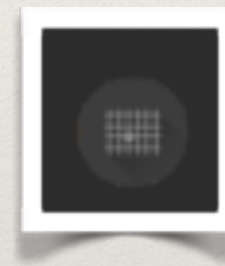


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# View Modes

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- ❖ Some extra features available are:
  - ❖ Grid On/Off : Clicking on this will toggle between visually showing the grid or not. (2d mode)
  - ❖ Half Wall On/Off: Toggle between reducing the wall height to half or full.





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# View Modes

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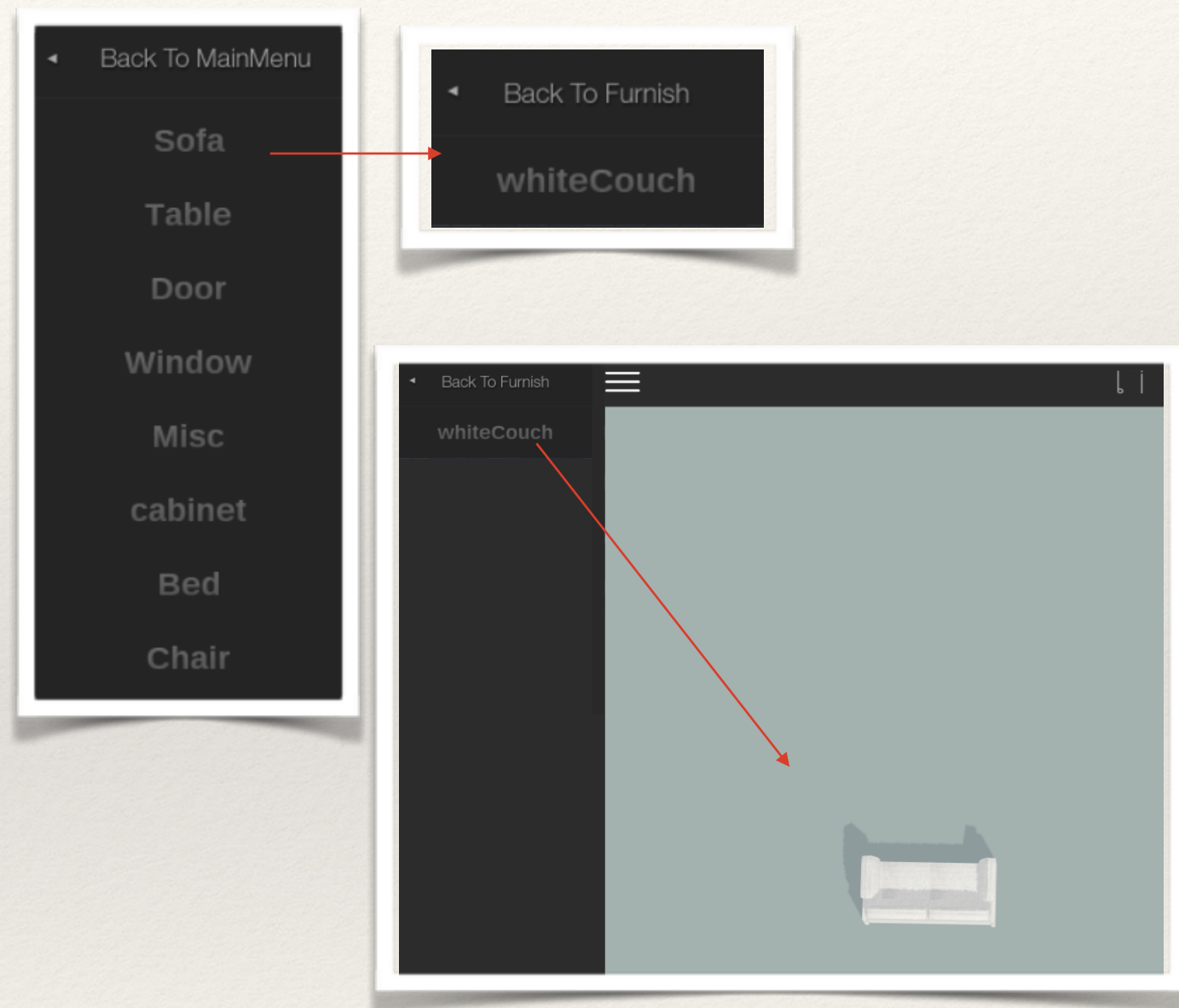
- ❖ Issues/ Bugs :

- ❖ Grid / Zoom can be made smoother /better.
- ❖ In 3d, arrows for pan has to be on repeat/smooth.
- ❖ Wall transparency right now makes only one wall which the user is looking at a straight angle. Already this is sometimes heavy on the system, we might need to look into it if we want a better system,
- ❖ Camera transitions between modes can be made more smoother. We need to look into the underlying basic principle once again to decide what exactly is user friendly and necessary.



# Furnish

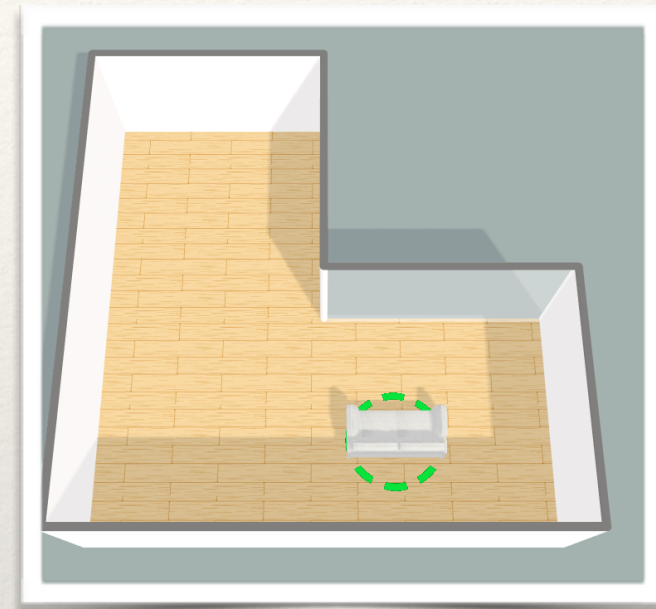
- ❖ Menu - > Furnish will get you the menu where different categories of interior assets are shown.
- ❖ When these categories are clicked, next panel opens and loads the available assets under it.
- ❖ You need to drag from the button to the scene. The placeholder asset is spawned and then the correct asset from online is shown.





# Furnish

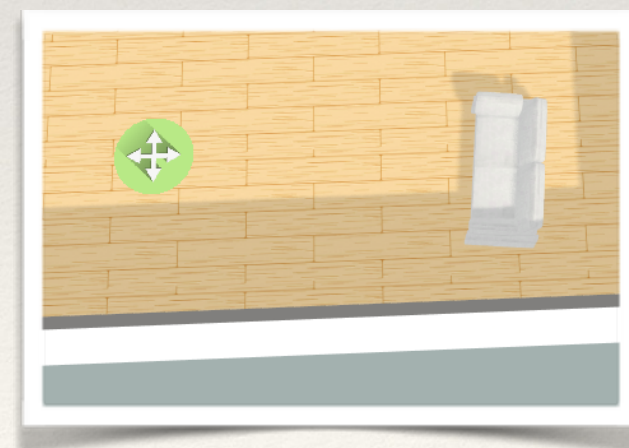
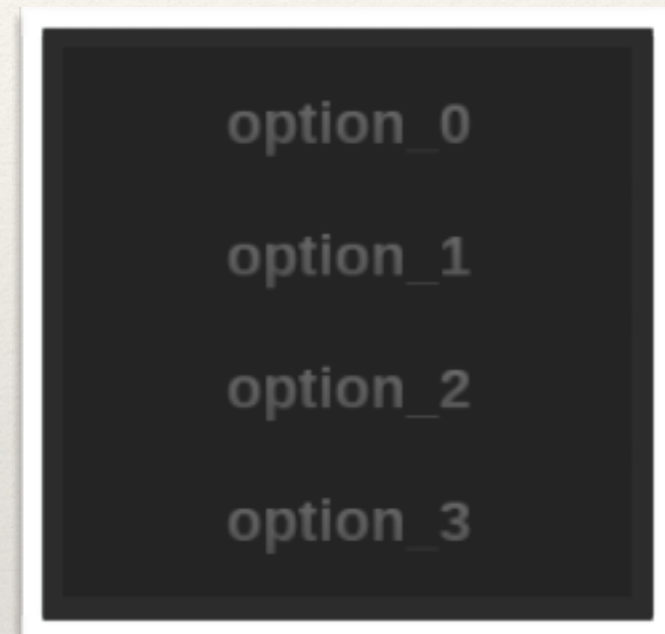
- ❖ Interior objects can be selected and the selection symbol is shown and the 3d camera is centered on it.
- ❖ They can be dragged around the scene and placed wherever needed.
- ❖ Bring up the context menu and user has the options of Adding to cart, rotate, change texture and delete.





# Furnish

- ❖ Selecting the texture button in the context menu pops up another side panel where different options are given. Once selected the object changes its texture and the panel is closed.
- ❖ Selecting the rotate button brings up a rotation button which can be dragged around.





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# Furnish

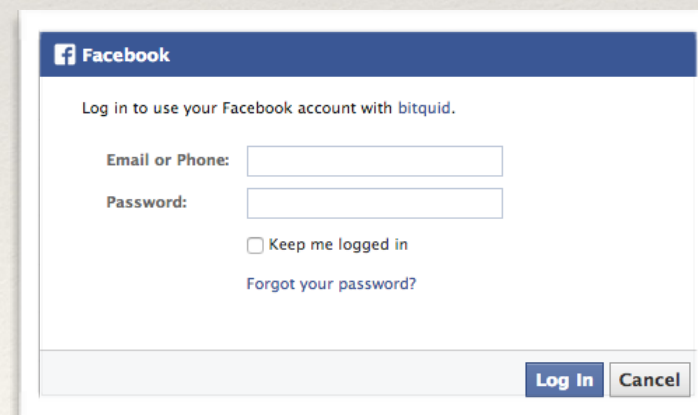
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- ❖ Issues / Bugs :
  - ❖ The server -client architecture needs to be optimized. The way we download objects and the categories needs to be revisited.
  - ❖ Needs to be checked for slower internet connections.



# User Accounts

- ❖ Users can sign up for saving their projects and also for adding anything into the shopping cart. Clicking on the accounts button will bring up the accounts panel.
- ❖ User can click on sign up or enter the username and password and click on Log.
- ❖ Log-in using Facebook will get a pop-up asking for Facebook username and password. They will be then logged in using those credentials.





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# User Accounts

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- ❖ When you have logged in - users can now see load / save project buttons.
- ❖ Click on save to bring up a save panel. Give it a name and press save.
- ❖ Click on load to show the list of scenes saved before in this user account. Click on one of them to load.





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# User Accounts

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- ❖ Issues / Bugs :
  - ❖ Loading and Saving objects needs to be looked again for timing issues. Loading of projects need to be visually shown better. (with new UI this issue can be solved). Slower internet connections also have to be taken care of.



# Shopping Cart

- ❖ Once a user is logged in , the check out cart is created. Initially it is with zero items.
- ❖ The user can click on the check out cart to see the item list. If its empty the BUY button is disabled.
- ❖ When a user selects add-to-cart on an object , the check out cart shows a loading screen and then adds the respective object to the cart.
- ❖ When more than one object is available on the cart and then buy is clicked - The buy panel is showed.

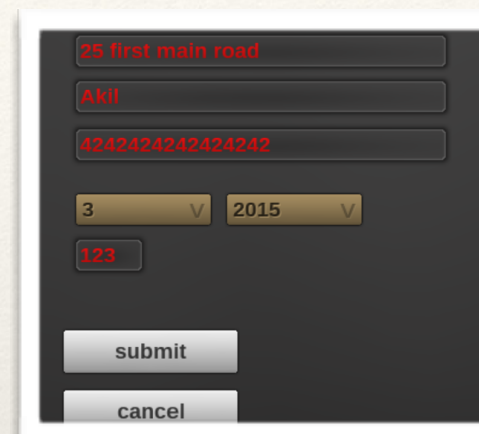
check out cart  
0

Items	qty	price	Sub Total
<input type="button" value="Buy"/>			Total = 0 <input type="button" value="clear"/>
<input type="button" value="cancel"/>			



# Shopping Cart

- ❖ User can click on clear in the cart panel to delete all items in the cart.
- ❖ In the buy panel if the purchase goes through , The user will be shown a success message . If the card details are wrong or if the transaction does not go through , Failure message will be shown.
- ❖ In case of a successful transaction, the cart is made empty again. The user will get an email from bitquid with a confirmation of items bought.
- ❖ Transaction details can be viewed in our database as well as in the Stripe user account. (Right now we are using the TEST api and when it is ready for launch, the PROD api can be used)



25 first main road

Akil

4242424242424242

3 2015

123

submit

cancel

Hi d,

Your order has been successfully placed with us  
Details => Address : domlur , Amount : 597

Product Details :  
=====

Product 1 :  
Product Name : lazy boy sofa  
Product Quantity : 3  
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Thank you for shopping with us.



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# Next Steps

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- ❖ UI/ UX needs to be thought of again and redesigned.
- ❖ ‘Undo / Redo’ and ‘NEW project’ has to be updated with the recent new features. (updated object selection/ rotation , shopping cart, etc)
- ❖ Fix any bugs and issues already known. \*
- ❖ Check the optimization (for all features) on different systems with varied internet connection/ processor speeds.
- ❖ Review and decide which is the best way to handle asset bundling. (Have it bundled with the application/ download it/ mixture of both)

\* Issues which have been listed in the previous slides.