

Design Document

Version 0.3

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Purpose Of This Document

This document is to list all features and implementation method to ensure that the implementation fits the concept and general vision of the game.

For each element is described which **game purpose** it serves, what the element will **look like**, how the element is **interacting with the world** or **being interacted** with in all possible scenarios, please describe **invalid scenarios** as well.

Use tables, spreadsheets and charts to assign **real values** to the element, if possible.

Creating / implementing a **quick prototype** and link it to the element is invaluable in terms of communicating the vision behind the concept. This could be a artist sketch or a Mock-Up implementation / drawing that only shows the basic functionality in a static environment.

Please also add a **concept, how** the element could be created / implemented (communicate with the developer / artist) and **provide some alternatives** for faster or more detailed creation / implementation.

Prioritize the element using one of the following categories:

Mo - Must Have: The most vital things the game cannot exist without

S - Should Have: Things considered to be important but not vital to the success of the game

Co - Could Have: Nice-to-haves features

W - Won't have: Elements that would give little to no value

A quick introduction into MoSCoW prioritization: <https://tinyurl.com/lf3upqn>

Set the status of the element:

1. **Unconfirmed**: The element have not yet been reviewed

2. **Confirmed**: The element was reviewed and approved

3. **In Progress**: The element is currently under development, contact developer in case of changes

4. **Released**: The element was fully implemented and is ready for test

5. **Verified**: The element has been successfully tested

These concepts are by all means **not final**: You are welcome to use your imagination to even surpass the expectations of the author. But please do not forget edit the element afterwards to fit your implementation and inform the development and test manager about the changes.

If there was already a change within this document version, please create a new one so we don't lose change history.

For detailed information about the concept of this document you are welcome to read the original concept

<https://tinyurl.com/kzm5a3x>.

Login

Overview: The login system exists to restrict players from accessing eachothers avatars and from accessing the same account from multiple points at the same time. Due to this the system needs to be secure and have the ability to recognise returning players

Features:

1	Secure login system with protected and encrypted passwords	In Progress	<u>Mo</u>
	This will prevent the system from being vulnerable from external attacks and will prevent players from accessing eachothers accounts		
2	Password recovery system linked to players emails	Confirmed	<u>Mo</u>
	This allows players to continue using their accounts after losing their password by using a personal email to verify the players access and then allowing the player access to change their password.		
3	Modern, user friendly and stylish login system (without google warning)	Confirmed	<u>Mo</u>
	This will be one of the first screens seen by a player and should give them confidence as to the professional and quality design and implementation of the game		
4			

Values:

Current design of system exists and table layout seen as "Profile" on database structure

Prototype:

TBC

Realization:

In progress

Changes:

27/06/2017, Maxmansung, v0.2, Added login details

Sign-Up

Overview: The login system exists to restrict players from accessing eachothers avatars and from accessing the same account from multiple points at the same time. Due to this the system needs to be secure and have the ability to recognise returning players

Features:

1	The ability to activate your game account using an email verification	In Progress	<u>Mo</u>
	This will ensure that players email accounts are live and access, it will also allow players a secure back-up system for account recovery if their password is lost. This system also prevents multiple accounts being made quickly by a single player		
2	Automatic removal of unverified accounts after a time period	Confirmed	<u>Mo</u>
	This will prevent the database becoming overwhelmed by multiple accounts that are created without verified emails		
3	Prevention of multiple accounts created from the same IP address	Unconfirmed	Co
	This could reduce the risk of attacks on the system by automatically preventing more than a specific number of accounts to be created from a single IP		

Values:

Current design of system exists and table layout seen as "Profile" on database structure

Prototype:

TBC

Realization:

In progress

Changes:

27/06/2017, Maxmansung, v0.2, Added sign-up details

Buildings

Overview: The buildings tab allows players to spend stamina and items to create specific buildings that will allow bonuses to players survival and give bonuses to those players involved. Key buildings will be individually described within the document however the overall act of building will be layed out here.

Features:

1	The building menu displays all of the buildings that can be built including their resorce and stamina cost	In Progress	<u>Mo</u>
	This will allow players to plan ahead and understand exactly what will be needed to build each building. Those buildings that cannot be built due to a lack of resorces will be marked appropriately and buildings that require a parent building to be created will also be marked appropriatly. Buildings that have been built already on the zone will be marked as such		
2	When the “Build” action is performed the building selected will have a specific amount of stamina added to its creation	In Progress	<u>Mo</u>
	This action will remove stamina from the players stamina count and add it to the buildings stamina used count. This amount cannot be more than the players current stamina and cannot add more than the difference between the buildings current stamina and stamina required for completion. This action can be performed as many times as the players stamina allows		
3	Stamina spent on buildings is visible to all players on the zone	In Progress	<u>Mo</u>
	Every player within the zone (who have permission) will be able to see the stamina spent on the zone by all players. This stamina is contributed to be all players within the zone and is permanant for the zone.		
4	When the stamina spent equals the stamina needed the building becomes built	In Progress	<u>Mo</u>
	This allows players to complete buildings. Once a building is completed all of the resorces required to build the building will be removed from the required location (Zone or Storage). The building will then become activated and any actions that are allowed with its creation will become visible (See specific buildings for actions possible).		
5	Each zone has an individual build list. Buildings built in 1 zone are not visible on any other zones	In Progress	<u>Mo</u>
	This means that when a building is completed in a specific zone it effects only that zone and players in other zones will not have access to the building and will not find it impacting the build list for the zone they are on (Stamina required and spent and buildings		

	completed will remain the same on other zones)		
6	The same building cannot be built twice on the same zone	In Progress	<u>Mo</u>
	This prevents players from building a beneficial building multiple times in order to gain the same benefits multiple times. At the present time there is no plan for temporary buildings that can be built multiple times		

Values:

The build menu is created using the “Building Template” database and the “Buildings” database. The building template will give the basic information about all of the buildings and the buildings database will record any stamina spent on specific buildings and note if they have been completed. It will also record any fuel added by the buildings.

Prototype:

TBC

Realization:

In progress

Changes:

29/06/2017, Maxmansung, v0.2, Buildings details

Building - Firepit

Overview: The firepit is one of the first buildings that players will build. This works as the main tool for survival and allows players to decrease the survivable temperature of a zone as required using items found rather than stamina. Items dropped into the firepit will act as fuel and the total amount of fuel will effect the survivable temperature of all players within the zone (as long as they have access to the zone).

Features:

1	Players can view the firepit fuel, effect on survivable temperature and items in their backpack on the firepit screen	In Progress	<u>Mo</u>
	This allows players an up to date view of the impact they are having on survival when using the firepit by showing what has been added and what changes when more items are added. By showing the backpack this allows players to see what items they are able to add to the firepit still		
2	Items can be removed from the player backpack by the player and added to the firepit	In Progress	<u>Mo</u>
	This allows players to increase (or decrease) the fuel within the firepit by dropping items into it. Any item dropped into the firepit will be removed from the game and the firepits fuel value will increase (or decrease) with a specific fuel value related to the item dropped		
3	Players on the zone will see their survivable temperature modified by the firepit	Confirmed	<u>Mo</u>
	Players survivable temperature will be directly effected by the firepit. All players within the zone will gain the same effect from the firepit unless they do not have access to the zone (See "Building - Lock")		
4	Some items will have the ability to decrease the amount of fuel within the firepit	In Progress	<u>Mo</u>
	By including items that decrease the amount of fuel within the firepit players will be able to impact each other negativly and create an enviornment where trust must be gained. This will promote players to work within small groups and to develop systems of trust. This will also allow conflict to arise within the game		
5	When the firepits fuel value reaches 0 it will be destroyed	In Progress	<u>Mo</u>
	By having the firepit building disappear when its value reaches 0 players will be forced to monitor the pit daily and ensure that it contains enough fuel to keep them alive without wasting fuel. This will create a more complex puzzle as players will need to balance survival and resorces with the risk of loosing the firepit. Loss of a		

	firepit will require it to be rebuilt which costs excess items and stamina		
6	When the day ends every firepit across the map will lose half of its fuel	Confirmed	<u>Mo</u>
	The loss of fuel overnight will mean that players must carefully balance the amount of fuel added to the fire each day with the amount of heat needed to survive. If too much fuel is added players will waste items whilst if not enough is added players will risk dying		
7	Adding items to the firepit does not cost stamina	In Progress	<u>Mo</u>
	By making the act of adding items to the firepit a free action players will be able to spend time carefully managing the firepit and ensuring that it is optimised properly for their survival. This will also encourage players to use the firepit frequently as it will be the easiest method to increase survival		
8	The firepit allows creation of the “Torch” item	Confirmed	S
	By creating a firepit players will then be able to transform “Stick” items into “Torch” items at the cost of 0 stamina. See “Items - Torch” for more information about the torch item		

Values:

The values for the firepit building are held as an individual object within the “building templates” table. Each firepit built within the game will be created as a new item on the “building” table. The fuel value of each item is held within the “items template” table.

Prototype:

TBC

Realization:

In progress

Changes:

29/06/2017, Maxmansung, v0.2, Firepit-building details

Building - Lock

Overview: The lock building exists in two forms: “Gate Lock” and “Storage Lock” however both perform a similar function. The lock buildings prevent players that are not part of the group that have claimed the zone from accessing either the town or the storage.

The “Gate Lock” prevents players outside of the group that owns the zone from accessing the zone buildings at all. Players will be unable to see what has been built, access the firepit to add items or receive a bonus to their survivable temperature from it, to see what is within the storage or gain any bonuses from buildings.

The “Storage Lock” will prevent players from removing anything from the storage building only. Players will be able to see what is within but be unable to take items or add items to the storage.

Locks will have a health option that allows them to be worn away using stamina. This will give players outside of the group the ability to eventually gain access. Players within the group will also be able to repair the locks using stamina giving them the ability to prevent access of opposing players

Features:

1	Locks once built prevent players outside of the group from accessing the secured storage or buildings	Confirmed	S
	By preventing other players outside of the group from accessing the storage or buildings secured by the lock players are able to restrict the access of others. This allows players to ensure that their buildings and resources and buildings are secured from others. By securing only the storage players can allow those outside of their group to benefit from other buildings such as firepit whilst being unable to steal important items		
2	Stamina can be used by players within the group owning the zone to reinforce the lock	Confirmed	S
	By allowing opposing players the ability to break down locks players will be able to access strong groups resources and benefit by stealing from them at a high cost to themselves.		
3	Stamina can be used by players outside of the group owning the zone to break down the lock	Confirmed	S
	By being able to reinforce their lock players can ensure that their zone remains safe from being gradually chipped away over time by opposing players. Those aiming to break through locks will often need to break locks in a single attack		
4	A lock cannot be reinforced more than its maximum health	Confirmed	S
	Locks should only be able to be reinforced to a maximum. This will		

	prevent players from spending large amounts of stamina to make their gates have health that are too difficult to break though by other players		
5	When a locks health reaches 0 the lock building is destroyed and players an gain access to the secured storage or buildings.	Confirmed	S
	Once a lock has reached 0 health other players will be able to access the region. This will mean that the group owning the zone will have to rebuild the lock at the cost of resorces and stamina.		
6	Players are able to see if a zone has been secured and if they have access	Confirmed	S
	This will ensure that players are able to see if the zone is accessable to them and clearly explain to them why they are unable to access if that is the case.		
7			

Values:

The statistic for the zone lock are held within the “Building Template” database and the “building” database. Once built the “FuelBuilding” variable will act at the maximum health and the “fuelRemaining” variable will act as the remaining health

Prototype:

TBC

Realization:

In progress

Changes:

29/06/2017, Maxmansung, v0.3, Lock-building details

Building - Outpost

Overview: The outpost building acts as the method by which zones are claimed by a group.

Once built the group that added the final AP claim the zone as their own. The outpost building is also the parent for any buildings that are group specific (see “Building - Locks” for an example of a group specific building)

Features:

1	Outpost building once built claims the zone as the groups zone	Confirmed	S
	Once built any locks will allow access only to the group that built the original outpost. Players within the group will have access and players that leave the group will lose access.		
2	The outpost building can be rebuilt at an additional cost to change the ownership of a zone to a different group	Confirmed	S
	This will allow groups to take over zones that have been abandoned by groups due to group changes to the death of groups. Building a new outpost will need to be expensive enough to make it difficult to do (to prevent other groups from taking over groups zones as an aggressive tactic) but cheap enough to do that it is worth taking over dead groups zones on occasion.		
3	The outpost building gives access to group unique buildings	Confirmed	S
	This ensures that buildings that perform group specific actions (such as securing the zone from those outside of the group - see “building-lock”) will all be linked to the same group rather than multiple different groups		

Values:

The outpost building will be created using the “building template” object and made into a building upon stamina being spent on it in a zone. The statistics will not vary from other buildings however it will be searched for during general searching for created buildings in a zone when creating the building view statistics for a player to ensure they do not gain a view of a zones buildings and storage they do not have control of and access to.

Prototype:

TBC

Realization:

In progress

Changes:

01/07/2017, Maxmansung, v0.3, Outpost-building details

Building - Storage

Overview: The storage building is a way for groups to secure large amounts of items from those outside of their groups. When first build the storage simply acts as a place to hold items similar to the ground of a zone. However once a gate or storage “lock” has been built (see “building - lock”) the storage building then becomes a safe location to store items from those outside of a group.

Features:

1	Once built players can place items into the storage building	In Progress	<u>Mo</u>
	Items can be taken from players backpacks and placed into the storage building to allow those items to be protected by the group as a whole		
2	Once built the building tab no longer uses the zone ground to find building materials but instead uses the zone storage	In Progress	S
	This means that once a storage building is built only those with access to the storage have access to the resorces used to build buildings, this prevents players from outside of the group stealing resorces needed to build buildings		
3	Players can upgrade the storage building to allow more to be held within it	Confirmed	S
	This will cause players to carefully balance the need to upgrade storage with the items they currently have and ensure that they work efficiently		
4	Storage buildings have a maximum item limit	In Progress	S
	By placing a limit on the storage items players will need to carefully manage the items placed into storage and balance the resorces used to upgrade the storage building with their needs		

Values:

The storage building is held within the “Storage” table with the associated values.

Prototype:

TBC

Realization:

In progress

Changes:

01/07/2017, Maxmansung, v0.3, Storage-building details

Items

Overview: Items are the main resource used within the game and combined with the stamina they create the puzzle of survival that players have to work through. Each item within the game will be used for specific purposes and will either be found randomly by searching the environment or created using buildings within camps. Multiple items may have the same purpose and single items will have multiple purposes in order to give players the opportunity to discover the most efficient use of each item they have based on the current in game situation.

Features:

1	Items can be found in the world randomly	In Progress	<u>Mo</u>
	The finding of items in the world occurs using the search function however the actual item that is discovered each time is random with a few specific variables controlling it (such as biome type and players search chance)		
2	Items in existence can be seen by the players with a unique image and flavour text	In Progress	<u>Mo</u>
	This will ensure that players know exactly what items exist around and can quickly and easily identify them		
3	Specific items can be transformed into new items under certain conditions	Confirmed	<u>Mo</u>
	This allows players some control over the items they have by converting them into specifically needed items as their production grows		
4	Items are persistent within the world until consumed by a specific event	In Progress	<u>Mo</u>
	Items should never disappear unless consumed in a clear event (See "Buildings"). Any item can be moved between different locations (See "Item Movement") but its location should always be clear.		

Values:

Items details are held within the "Item Template" table and specifically created items are held within the "Items" table. The items location are held within arrays within the avatar, zone and storage objects.

All items values are held within the "Items template" table and any recipes involving items will be held within the "Recipes" table. Buildings requiring items will show so within the "Building template" table

Prototype:

TBC

Realization:

In progress

Changes:

02/07/2017, Maxmansung, v0.3, Item details

Item - Stick

Overview: The stick is one of the most common and basic items in the game and is currently the most used item (as of 02/07/17). It is used in the construction of the firepit and acts as the main source of fuel to maintain players heat. Sticks can also be converted into torches to act as a personal source of heat for players.

Features:

1	Sticks can be added to the firepit to increase the firepits fuel	In Progress	<u>Mo</u>
	When sticks are added to the firepit they are consumed (See “building-firepit”) and the firepits fuel value increases. This makes sticks one of the more essential items for survival and sill be sought after by players		
2	Sticks can be converted into torches when in a zone with a built firepit	Confirmed	<u>Mo</u>
	The construction of a torch consumes the stick, this allows players multiple methods that can be used to gain heat from the sticks that are in direct competition		
3			

Values:

All items values are held within the “Items template” table and any recipies involving items will be held within the “Recipes” table. Buildings requiring items will show so within the “Building template” table

Prototype:

TBC

Realization:

In progress

Changes:

02/07/2017, Maxmansung, v0.3, Item-Stick details

Item - Snow

Overview: The snow item is one of the most commonly found items within the game (this is an arctic wilderness after all). Snow is used as a base item to construct many buildings but can also be used as a weapon. This is due to the fact that it works as a negative fuel source when added to a firepit, therefore creative/aggressive players can use it to cripple those outside of their group

Features:

1	Snow can be added to the firepit in order to reduce its fuel value	In Progress	<u>Mo</u>
	This allows players an option to negatively impact others within the game, increasing interaction between groups and bringing an element of conflict to the game when needed		
2			
3			

Values:

All items values are held within the “Items template” table and any recipies involving items will be held within the “Recipes” table. Buildings requiring items will show so within the “Building template” table

Prototype:

TBC

Realization:

In progress

Changes:

02/07/2017, Maxmansung, v0.3, Item-Snow details

Item - Torch

Overview: The torch item offers an option to increase a players personal warmth without assisting anyone else in the map. By creating a torch a stick is wasted (that could be used to increase the fuel value of a firepit). Torches last only a short length of time to reduce the benefit of making all sticks into torches. This creates a conflict between the small group benefit of a stick vs the larger personal benefit of a torch

Features:

1	Torches increase the players minimum survivable temperature when held	Confirmed	S
	Multiple torches add together to create a greater heat increase for players. This allows players to selfishly create many torches from the maps sticks in order to gain a personal temperature advantage over other players		
2	Torches are destroyed overnight or converted into a less useful item	Confirmed	S
	This ensures that the creation of a torch similar effect to the use of sticks as fuel (the fuel in a firepit drops after each day). Torches will dissapear causing players to constantly replenish their torches within their bags to maintain the same benefit each day.		
3	Torches cannot be converted back into sticks once they have been created	Confirmed	S
	This ensures the act is permanent and promotes players to think about their actions due to the consequences		

Values:

All items values are held within the "Items template" table and any recipies involving items will be held within the "Recipes" table. Buildings requiring items will show so within the "Building template" table

Prototype:

TBC

Realization:

In progress

Changes:

02/07/2017, Maxmansung, v0.3, Item-Torch details

Movement

Overview: This is the system by which the player explores the world around them. By moving between zones the player can uncover new regions, players and groups. Players movement is restricted by their stamina to ensure that the entire map cannot be explored on the first day (leaving nothing left to be explored in future days). Players movement will be around a square map of limited size, upon reaching the edge of this map players will be unable to walk any further.

Features:

1	Players will be able to walk in 4 directions (N, E, S, W) from their current point on the map	In Progress	<u>Mo</u>
	This allows players choice as to how they explore the map and options as to which direction to go to escape others. (This is limited by point 2)		
2	Players cannot walk further than the edge of the map	In Progress	<u>Mo</u>
	Players outside of the map screen will be inaccessible to the game, therefore it must not be possible to walk further than the map allows in any of the 4 directions.		
3	Moving in any direction costs stamina and players cannot move if they have no stamina	In Progress	<u>Mo</u>
	The use of stamina prevents players from moving unlimited amounts each day. This also causes players to plan their routes and made difficult decisions about their use of stamina		
4	Moving into an unexplored zone makes the zone explored and known to the player for the rest of the day	In Progress	<u>Mo</u>
	This allows players to explore the world and begin to map out the biome types that exist in order to find optimal routes and camp zones		
5	Moving out of different biomes costs different amounts of stamina	Unconfirmed	Co
	This would prevent players from being able to accurately plan routes across unknown regions of the map. By doing this it will increase the need to explore areas and to over prepare for unknown routes		

Values:

The map object exists as a combination object using the zone objects, the biome types and the players exploration value. Movement occurs within this map object using 4 directional variables. These variables are posted to the PHP database which then interpretes them into the resulting movement or error.

Prototype:

TBC

Realization:

In progress

Changes:

29/06/2017, Maxmansung, v0.2, Movement details

Inventory / Item Movement

Overview: Items found within the game need to be able to be moved by the player to a required location and to be stored in order to allow players to hoard the resources required to survive (even at the detriment of others).

Features:

1	Avatars can pick up items from the ground and store them within their personal backpack	In Progress	<u>Mo</u>
	This allows players to transport items between zones as the items will move around the map with the player		
2	Items in the players backpack cannot be accessed by any other players	In Progress	<u>Mo</u>
	This ensures that items collected by the player are personal to the player. This also allows players to hoard rare or important items as required in order to gain an advantage		
3	Items in the players backpack can be placed back onto the ground	In Progress	<u>Mo</u>
	This allows players to place important items into a required zone to facilitate survival or the construction of specific buildings		
4	Items in the players backpack can be placed into a built storage object	In Progress	<u>Mo</u>
	This allows a larger area to place items outside of the ground and the players backpack. Due to the limited capacity of the players backpack and open access of the ground a 3 rd region is required to store items		
5	Items in a storage object can only be picked up by players with access to the object	Confirmed	S
	This ensures that the storage building has the advantage over the ground that it can be secured. This allows individual or groups of players to secure items away for use later in the game		
6	Players backpack has a limited capacity	In Progress	<u>Mo</u>
	This prevents players from being able to hoard too many items from other players and to introduce the puzzle of forcing a player to select the most important items for them each time		
7	Items in a players backpack are dropped onto the ground after death	Unconfirmed	S
	This prevents players from stealing rare or important items from others and then dying, thereby removing those items from the game		

Values:

Items are designed within the “Item Template” table. Once an item is created on the map it is added to the “Item” table and its ID is added to the array of the object holding it (either the zone, the avatar or the storage). ID’s are then removed or added to the corresponding arrays by the PHP script to ensure that items constantly move between objects as required

Prototype:

TBC

Realization:

In progress

Changes:

27/06/2017, Maxmansung, v0.2, Item movement details

Stamina

Overview: Stamina is the main mechanic within the game that causes players to think and plan out their moves. The amount of stamina a player has to use each day is limited to a specific quantity that is then spent to perform certain actions. Once this stamina is depleted the player will have to wait until the stamina is refreshed in order to continue to perform those actions.

Features:

1	All players have a maximum amount of stamina that can be held at one time	In Progress	<u>Mo</u>
	By limiting players maximum stamina they will be unable to gain large amounts by being inactive for long period, thereby ensuring that players remain regularly active. (This maximum amount is yet to be defined)		
2	Players gain stamina at regular intervals during the game	Confirmed	<u>Mo</u>
	This regular boost of stamina will ensure that all players are given an even chance at survival by all getting the same stamina to spend at the same time. This time period could be once at the day end or at multiple periods throughout the day. (The exact amount gained is to be defined)		
3	Stamina is used to move between zones	In Progress	<u>Mo</u>
	By using stamina to move between zones players will be unable to explore the whole map on day one and will have to limit their movement often. The cost to move between zones may vary (see "Movement" section for more details)		
4	Stamina is used to construct buildings	In Progress	<u>Mo</u>
	By using stamina to constuct buildings this will restrict the number of buildings that can be constructed in one time and will ensure that some buildings can only be constructed by larger groups working together or by a single player focusing their efforts		
5	Stamina is used to search zones for items	In Progress	<u>Mo</u>
	By using stamina to search zones players will be unable to deplete large numbers of zones quickly or easily find large quantities of items without focus.		

Values:

Stamina is held within the "Avatar" table within a single variable. The amount of stamina used for actions is defined within the "biome" and "building template" tables

Prototype:

TBC

Realization:

In progress

Changes:

27/06/2017, Maxmansung, v0.2, Stamina details

Profile

Overview: The profile is the users main access to the game. This is the persistent section that continues between individual games holding information about acts achieved within games, records of survival in games and other persistent facts. It is the record that can be seen by other players to understand someone's playstyle in games and their knowledge of the game

Features:

1	Players are given access to their profile on logging into the game	In Progress	<u>Mo</u>
	When a player logs into the game they will then be able to view their own profile page by clicking on their login information. This profile page will give the player unique access to edit certain information		
2	Players gain achievements in a game that are added to their avatar at the end of the game	In Progress	<u>Mo</u>
	During a game players will gain achievements for specific actions or events. These achievements will then be added to the players profile record at the end of the game. Achievements should stack (players can gain multiple of the same achievement which would be added to from each game)		
3	Players can view their own and others profiles	In Progress	<u>Mo</u>
	When clicking on a players name in game or searching for them through the search option will bring direct the user to the profile page of that player. On this profile page you will be able to view the achievements, history, bio and avatar of a player.		
4	Players can edit ONLY their own profile by changing their avatar image	Confirmed	S
	Players will be unable to edit the layout of other players profile but will have the ability to upload a new avatar image for their own profile. This will then change the visible avatar of the player for all other players to see		
5	Players can edit ONLY their own profile by changing their bio	Unconfirmed	S
	Players will have access to change their bio description on their own profile page. Only the owner of the profile page will be able to edit this however the output will be visible to all other players		
6	Players can see records of previous games played with their date of death and players they have played with	Unconfirmed	S
	Players profile will hold a record of all previous games played. These records will be able to be expanded to show all other profiles that were in the game and the length of time each player survived for.		
7	Players profiles hold a record of their current game and	Unconfirmed	S

	allows them access to their current game		
	The players profile acts as the link to their ingame avatar. By logging into the service and accessing their profile players will be linked to their current in game avatar. Players will be able to play only 1 game at a time and this will be restricted by their profile account		
8			

Values:

All of the values for the profile object are held within the “Profile” table on the database

Prototype:

TBC

Realization:

In progress

Changes:

29/06/2017, Maxmansung, v0.2, Profile details

Groups

Overview: Groups are the mechanic that allow players to work together, turning the game from a solo experience into a combined effort. By forming groups players will gain the advantage of sharing resources and an aim and can prevent those from outside of their group from accessing their resources. All players start the game within a group however that group has only themselves, players can then join each other's groups (thereby leaving their own groups). Players have to request access to join other's groups and then be accepted by those players within the group. A majority of the players within the group have to accept the request to join for the player to be accepted.

Once in a group players can opt to leave their groups if there is more than 1 player within the group. Leaving is automatic if requested by the player and upon leaving players will be allocated to an empty group.

Players can also opt to dismiss other players from their group if there are 3 or more players within the group. The request to dismiss a player then leads to a vote of the group, if a majority of the group vote for the player to be removed then that player is removed from the group.

Features:

1	Players start the game in a group with no other players	Confirmed	<u>Mo</u>
	This ensures that players have the opportunity to experience playing alone and have to find other players naturally over time		
2	When on the same zone as another player if you are in a group of 1 you can request to join that player's group	Confirmed	<u>Mo</u>
	This will allow players to join with others however it ensures that players find each other first and spend enough time together on a zone to make the request. This should encourage communication.		
3	Requests to join a group are removed if the requesting player moves	Confirmed	<u>Mo</u>
	This allows the requesting player a method to cancel their request and also forces them to wait for the group. This will encourage groups to accept requests quickly if they want to grow and will encourage requesting players to communicate their wishes to join before requesting to prevent long waits		
4	Requests to join a group can be seen by all players of a group and the option to accept a request can be performed by all players of the group	Confirmed	<u>Mo</u>
	This allows the entire group to have an opinion on new admissions rather than a single player controlling the group.		
5	When a specific percentage of a group has accepted a request to join the requesting player is transferred into the	Confirmed	<u>Mo</u>

	group		
	The specific percentage will ensure that even if not all players within the group are active as long as a percentage are active and agree to accept a player then the player will be able to join the group. This is the same for denying requests		
6	When there are 3 or more players within a group the option to vote to kick any other player from the group exists for all players This allows groups to remove of players that are negatively impacting the group. It also allows some situations whereby a small group can cause a mutiny within a group in order to remove of disliked players	Confirmed	<u>Mo</u>
7	When there are 2 or more players within a group the option to leave the group exists for each player This allows players to back out of a group they dont like or to leave a group in order to join another if the oppertunity presents itself	Confirmed	<u>Mo</u>
8	All players within the group share the same “Map Exploration” variable and see the same view of the map This ensures that all players know where each other are. This also allows groups to work as a team in order to gain vision of the entire map and to plan more complex missions to ensure the most efficient use of stamina	Confirmed	<u>Mo</u>
9	All players within the group have access to group specific buildings This ensures that all members of the group can uses group specific buildings effectivly (See “Building - Lock” for examples)	Confirmed	<u>Mo</u>
10	All players within the group have access to a group exclusive chat This will allow players within a group to effectivly co-ordinate their plans and movements without the need for a 3 rd party chat systems that players arrange themselves	Unconfirmed	S

Values:

The values for the group are found within the “Groups” table. The group that each player are currently located within are found within the “Avatars” table. Zones will also have a group specific marker to show which group has claimed it currently.

Prototype:

TBC

Realization:

In progress

Changes:

02/07/2017, Maxmansung, v0.2, Group details

Map

Overview: The map screen is the page used to show the player their location within the world. Using the movement functions players are able to explore and by using a visual display of the world players are able to plan out how they will spend their stamina effectively. The map can also display the location of other known players locations, details about the current zone (including items on the ground) and will allow players to search the zone for new items.

Features:

1	Players can see the world map and their location within it	In Progress	<u>Mo</u>
	The world map will display the number of zones across the world in their correct locations, it will also show which zone the player is currently occupying and any zones that have been explored. The zones will display their biome type with a specific colour on the world map. The players location will be marked with a single recognisable image (currently that of a person)		
2	Players can click on individual zones to gain more information about them	In Progress	<u>Mo</u>
	Zones that are known to the player will display information about the biome type and any known players within that zone. Zones that are unknown to a player will only display their co-ordinates and the words "Unexplored Zone"		
3	Players can see the items on the floor of the zone they are in	In Progress	<u>Mo</u>
	These items will be displayed within a box and will be available to be picked up by any player. See "Item movement" table for more information		
4	When players move to a new zone that zone will become "Explored"	In Progress	<u>Mo</u>
	Explored zones give players information about that zone. Moving between zones is explained further in the "Movement" table		

Values:

The map object pulls together information from the "BiomeType" table, "Zones" table and uses the "ZoneExploration" array within the "avatar" table to give players specific information. Data will also be pulled from the "Items" and "Items Template" table to create the visible items on the ground and in the players backpack

Prototype:

TBC

Realization:

In progress

Changes:

29/06/2017, Maxmansung, v0.2, Map details

Zone

Overview: The zone is the individual location on the map that a player can be located in. The map is split into zones and each zone can hold any number of players and items. Each zone also has its own building list that is independant from all other zones. Players can move between zones using stamina but can only move to the 4 adjacent zones (see "Player Movement"). Zones also have specific biomes that dictate the items that can be found in that region, these biomes are changable and as a zone is searched it will eventually run out of findable items and deplete, this depletion causes the zone to change to its next biome type.

Features:

1	Zones have a specific number of searches that can be performed, once this is over no further searches can be performed	In Progress	<u>Mo</u>
	This ensures that zones do not give unlimited items to promote players moving around the map and eventually coming into contact with eachother		
2	Depleted zones change biome type overnight	Confirmed	S
	The creates a dynamic and changing world that ensures a players keep exploring regularly to understand what the surrounding enviroment contains		
3	Different biome types have different items that can be found there at specific chances	In Progress	<u>Mo</u>
	The gives the players to focus their searching to specific biome types when searching for specific items thoughout the game. This also makes some biome types more preferential than others		
4	Stamina spent on buildings within a zone is persistant throughout the game and does not impact other zones buildings	In Progress	<u>Mo</u>
	This allows groups to create seperate camps around the map without impacting on eachother.		
5	Items on the floor of a zone are accessible to all players	In Progress	<u>Mo</u>
	This ensures that zones are neutral ground with no player having control of the searching or the items that can be found. Players must build group buildings to prevent others from accessing specific items however the zone ground always remains neutral.		
6	Zones have no limit on the number of players that can be located there or the number of items that can be dropped on the floor there	In Progress	<u>Mo</u>
	This ensures that players cannot block a zone by focusing a large number of items or players within the zone.		
7			

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Values:

The zone values are held within the “Zone” table and the biome values specific to the zone are pulled from the “BiomeType” table

Prototype:

TBC

Realization:

In progress

Changes:

02/07/2017, Maxmansung, v0.2, Zone details

Menu

Overview: The menu screen is the window seen whilst outside of a game. This is the section that shows the games currently able to be joined and allows players to join those games.

Features:

1	A dynamically created list of maps that can be joined	In Progress	<u>Mo</u>
	This ensures that the map list is always up to date and only shows players the maps that they will be able to play		
2	Information regarding the map details and players involved visible to players	Confirmed	S
	This ensures players have the most information possible when making their choice to allow players to avoid those that they do not enjoy playing with or join maps with players they have met before		
3	A variety of map types that will offer different game modes for players	Unconfirmed	Co
	This will allow players the opportunity to try different challenges between updates to prevent the game from becoming stale too quickly.		
4	Players will be unable to join the same map twice	In Progress	<u>Mo</u>
	This will prevent players from filling up maps with clones of themselves. At present there is no scenario whereby players will be able to die before the first day has passed		

Values:

The values for the maps are held within the “Maps” table. These will be used to create the menu.

Prototype:

TBC

Realization:

In progress

Changes:

02/07/2017, Maxmansung, v0.2, Menu details

Other

Overview:

Features:

1			
2			
3			

Values:

Prototype:

TBC

Realization:

In progress

Changes:

Version History

0.1	19.04.2017	Nefasu	Initial creation of the document
0.2	27.06.2017	Maxmansung	Sign-up and Login details added
0.3	29.06.2917	Maxmansung	Details regarding buildings and items added