Working title: Before Legends

Version01: 14.02.2015

# Vision Statement

Before legends is a round based strategy-RPG fusion set in a prehistorical fantasy environment. The player will take charge of a small tribe and lead it in an epic journey on the way of becoming a civilization and thus forge the first legend of his people.

key words:

- round based

- strategy/RPG fusion

- make / be / forge the first legend of your tribe/ people

- total control of your tribe

- do it yourself - crafting, farming, building, hunting, fighting, exploring and improving the individual skills of your people as well as the traits of your tribe

- random generated map, new game = new world to explore

- primal, fantasy setting

- (?) decide on a life style - nomadic vs. settled

- contend against both nature and other tribes

- guide your people to the verge to civilization (and chose wisely your path ... )

# Game components

* Strategic Map
* Tactical Map
* Town Management
* Crafting
* Character Management
* Combat
* Resource collection
* Magic/Spiritual aspect
* Quests and peaceful NPC interaction
* Leveling and skill tree
* Strategic Map

Shows the world. The player as well as opponents are placed on the map. Player can move his units per tile on the map. Depending on their behavior, some opponents can also move on the map per tile (AI). The map shows and contains certain resources. Different map areas/tiles have different characteristics regarding: spawned opponent types, movement penalty, resources, the "appearance" of the tactical map on the given strategic map tile. Village/Camp are visible on the strategic map. Players units can commit various activities on the map tile they are placed upon during the players round, such as: rest (recover HP), move (to a adjacent tile), camp (to rest/craft items), hunt (output food, fur; output per round depends on: tile characteristics, unit skills, unit equipment),collect (food, herbs, other resources such as: wood, stone etc. if there are any available)(collecting recourses can be improved by equipping particular items: wood axe for chopping more wood, pickaxe for collecting stone, metals and such; some resources will not be collectable without the needed tool item), {NTH} build (camp, village, outpost, observation tower, mine etc.).

* Tactical Map

Is a different game layer loaded during combat. The characteristics such as appearance of the tactical map are defined by the strategic map tile the combat takes place on. Player and opponents can move on the grid (movement per round depends on , among others, unit speed per round) as well as commit their melee and ranged attacks. Every unit is "active" and proceed with its actions during his turn. Opponents act on behavior patterns (AI). More details under "Combat".

* Town Management
* Crafting
* Character Management
* Combat
* Resource collection
* Magic/Spiritual aspect
* Quests and peaceful NPC interaction
* Leveling and skill tree

# Game plans in modules

Plan A.1

Strategic map:

* Moving on strategic map
* Different terrain types
* Opponents on the strategic map
* Opponent behavior on the strategic map (AI)
* Randomly generated

Combat:

* Opponent units with skills and stats and behavior
* Combat mechanics
* Standard attacks
* Special attacks
* Feedback to player
* Victory incentives (beside experience) = loot

Plan A.2

Tactical Map:

* Separate game lair
* Random generated
* Different terrain types (obstacles)
* Player units and enemy units moving on map
* Combat interaction
* Opponent behavior on the tactical map (AI)

Character Management:

* Level and skills
* Experience generation
* Models and animations
* Inventory and items
* Weapon Mechanics

Plan B

Plan C

# World Map

## Hexagon Principle

The world map consists of hexagons. One hexagon represents an environment area, like swamp or field. Additionally it might contain a special prop like Stones, that can be harvested or give the player some kind of bonus.

The player tokens and enemies are representations and are not in correct proportion of the rest of the world. For instance a wolf that fills a tile is obviously not as large as the forest he is standing on. The correct proportions will be visible on the tactical map.

It is possible that multiple player tokens or multiple enemies stand on one tile. This will be abstracted and visualized by dots beside the figure. For instance a tribe member with three dots beside its model would mean that there are actually three tribe members. If such a tile is attacked, the player will have three tribe members, which he controls in battle. This works analogous for enemies.

## World Map Tile

What information does one Map Tile contains?

|  |  |
| --- | --- |
| **Type:** | *For example:* Forest, Swamp, Field, Savanna ... |
| **Combat Map:** | Background, assets (obstacles) |
| Output ("**Gather**"): | *For example:* Berries, Fruits, Wheat, Vegetables ... |
| Quantity: | N default + (+/-) % Random Variation |
| Output ("**Hunt**"): | *For example:* Meet, Fur, Bone... |
| Quantity: | N default + (+/-) % Random Variation |
| Output ("**Collect**"): | *For example:* Wood, Stone, Herbs, Copper ... *always 1 type (!)* |
| Quantity: | N default + (+/-) % Random Variation |
| Output ("**Grass**"): | Food for Animals - Player owned (Herds); - NPC (Passive Opponents - Mammoth, Boars, Rhinos...) |
| Quantity: |  |
| **Movements penalty:** | 0 to N |
| **Opponent Spawn:** | What type? With what chance:  % per round (after being discovered) % when discovered |

NOTE: (regarding **Depletion** and **Recovery** of resources)

The quantity of the particular resource is defined in the Tile Data. The recovery (per round) of the resource after being depleted is default by resource type, thus doesn't need to be defined in the Map Tile, however the Map Tile needs to calculate it (!).

# Player experience

What are the tasks of the player?

The player controls all characters of his tribe. Only one character at a time can have the **chieftain** promotion. If the chieftain dies, the player can chose which of the available characters in the tribe will inherit the chieftain promotion.

(…)

# Features

# Combat Mechanics

Standard components

AS (Attack skill) “The skill of a unit to successfully attack and injure the enemy”

DS (Defense Skill) “The skill of a unit to protect himself from the attack of the enemy”

D (Damage) “The basic level of injury the unit can cause with his weapon on the health of the enemy unit”

A (Armor) “The physical protection of a unit from the damage inflicted by the enemy in his attack. Armor has a negative correlation with AP.”

HP (Hit points) “The amount of inflicted damage a unit can take before being killed”

AP (Action points) “How many activities can a unit perform within 1 turn during battle. A combination of initiative, Stamina, Skill and motivation. Has correlation to the Speed of the unit. Is required and consumed when committing standard and special attacks.”

S (Speed) “How many map tiles on the tactical map can a unit move during his turn. Cost of move on the APs of the unit.”

Critical Strike

Critical Block

Combat steps and formulas:

MAD (Multiplication on damage (D)) “The success of the attack of a unit in relation to his AS vs the DS of the enemy. Has impact on the D.”  
MAD = (AS / DS)/10  
if AS > DS , then MAD = (+)  
if AS <= DS, then MAD = (-)

DV (Damage Value) “The value of the damage from an attack in relation to the MAD”  
DV = D + (D x MAD)

HPP (Hit points penalty) “The final value which will be subtracted from the HPs of a unit after he is attacked. Defined by the DV in relation to the A.”  
HPP = [DV / (DV + A)] x DV

**\*Action points (AP)**

APs are used only in the combat screen

What are action points? What do they represent?

The APs are representing the will power and initiative of a unit. They are this "energy" that make a human do more than the usual effort in a dramatic situation. In a way the APs represent what will would call "to walk the extra mile".  
This is why in their very essence APs are valuable and limited. The player can use them as a "resource" in combat to either commit a special attack/use special ability, or receive an extra standard **combat move**.

What is a **combat move** *(work definition, lets rename it if we find something more suiting to describe it)*?

In the turn-based time perception of a combat, a combat move represents what a unit can do during its turn. To increase complexity we will split the combat move in 2 phases. Both can be used for one of the following actions:  
- attack (melee)  
- move

The player can use them in any possible combination:

|  |  |
| --- | --- |
| Move | Move |
| Move | Attack (melee) |
| Attack (melee) | Move |
| Attack (melee) | Attack (melee) |

The Result however depends on the order of the actions in this 2 phases: so the action in the 1st phase will resolve with 100% of its potential, while the action in the second phase will resolve with 50% of its potential *(the 50% can be adjusted/rounded upwards, this is just an example placeholder number, the idea is that the first action the player takes in his turn is significantly stronger in output than the second)*. This means that if a unit has speed of 3 and decides to move in both phases of its turn, the total distance it will cover would be 5 ([first phase 100% of 3 = 3]+[second phase 50% of 3 rounded up = 2] = 5 moves in the total turn). Same applies for attack as well as for the combinations of attack and move. **EXCEPTION:** this doesn't apply in the case of move + attack; in this case although attack is in the second phase, both phases resolve with 100% of their potential.

How much will you get if you spend an action point to use a "third" action in one turn?

If the player spends an AP for additional attack or move, he will receive a "third phase" which will then resolve in 100% of its potential, if used for melee attack, or 50%, if used for move.

A unit can spend APs only once per combat round.

The APs of a unit will recover after the combat and can be used again in the next combat.

What about ranged attacks?

Ranged attacks consume both combat moves of a player, thus they cannot be used in combination with moving or changing to melee attack. So if a unit decides to use ranged attack he will only have this one ranged attack in his combat turn. The reason behind this "penalty" of ranged attacks compared to melee is the aim for realistic combat feeling - in real time it will take longer to load, aim and shoot something, compared to hitting something in front of you twice or taking few steps and hitting something once.  
The player can however receive a second shot if he spends an AP. Question: will the second shot resolve with 100%? = TBD (To Be Decided)

What about special attacks/special abilities?

Special attack or a special ability can be used only in the first phase of a combat turn of a unit. So a unit cannot move and then use them, or use standard melee/ranged attack and then use them. However (depending on the special attack/ability) after using them a unit may have a second action (move or melee attack, as normal). This means that all special attacks/abilities should have in their description as a variable if they consume the whole turn of a unit or only the first phase. The AP cost depends on how powerful the special attacks/abilities are.

**\*Bows and Arrows**

These are the most sophisticated ranged weapons in the game. They are crafted and used separately.

The Bow includes a minor AS bonus as well as the range. Some advanced bows may give a small D bonus.

The Arrows include the D as well as critical bonus, because they fall in the Pierce Weapons category. Arrows are always crafted in quantity of **5**. *(same applies for slingshots)*

**\*Combat Screen: who starts? Who is second etc.?**

For the combat screen

In Combat each unit acts his turn and then the next unit takes his turn and so on. The attacking party starts first. The order of taking turns for the player party, if multiple units are engaged in the combat, goes top down based on experience. The order of taking turns for the NPC party is determined randomly. In most cases if enemy units are stacked they would be of the same type, thus making no big difference for the game play on who will act first, second, etc. With Humanoid NPC opponents this may be different (about that - check humanoid opponents)

So if 2 tribesmen attack 2 wolves, the tribesman will have their turns, before the wolves. The Tribesman with higher Experience will have the first turn. Then the wolves take their turns, who will be first is random.

This order of turns for the combat is determined in the first combat turn and remains as so until the end of the battle.

*(NOTE: we could make it a bit more complicated by adding other variables to this ranking, such as AP or something else)*

*(NOTE: we can also change the order making it complex and requiring a new calculation for each battle to determine the order of units acting)*

**\*Regenerating HPs**

During combat a unit may lose HPs. There are 4 options to recover them:  
- regeneration  
- rest  
- use potion/food/tee etc.   
- use spiritual healing power

*(NOTE: all of the ratings below are open for discussion, testing and balancing)*

Regeneration

A unit has the ability to recover injuries passively without the player intervention. This is however a very slow recovery of 5% from default HPs per round. The positive thing about the auto regeneration is that the unit is not bound to lose turns on the world map but can continue committing all normal actions for the world map.   
This regeneration value can be improved by certain food/tee items in the unit’s inventory or with special perks earned with leveling up.

Rest

The player can click on a "rest" button appearing in the actions of an active unit (= a unit the player has clicked on) on the world map. This button will only appear for units with HPs below 100% and only if the unit is in a camp or in a village, and if the unit has enough food in the inventory. This "rest" action will then consume the whole turn of the unit on the world map, which means that the unit cannot move or commit any other action on the world map and then rest.  
In a camp a unit regenerates with 10% from default HPs per round.   
In a tribal camp a unit regenerates with 15% from default HPs per round.  
In a village a unit regenerates with 20% from default HPs per round.

potion/food/tee etc.

If the unit has in his inventory potion/food/tee with the ability to recover HPs, he may use it during his turn on the world map. This does not cost a world map turn, so the unit can continue with other actions on the world map for his turn.

***NOTE****: for the “should have” stage in regards of the use of potions/food – all such items are used passive (as described under \*Food, eating and starving to death).  
Active use of food item would be clicking on it in the inventory of the unit to consume it. The effect applies immediately. This action costs no turns. This active use of food items should be in place for items with general bonus effect, such items don’t have food value – so tee/potion items which deliver certain bonus when consumed. TBD if this is to be applied as should or nice to have(?)*

Use spiritual healing power

If the unit has a special healing power, ha may use it to heal himself or another friendly unit on the same tile during his world map turn. This action cost a world map turn.  
*(NOTE: we should discuss how this will be presented to the player in the GUI)*

**\*Food, eating and starving to death**

Food is the most basic and most important resource in the game. Each unit is "responsible" for his/hers food management. The player can easily manage this by making sure each unit has always enough food in their inventory. Every turn the unit consumes a food item with food value of 2 (for example). If a unit ends up with no food items in their inventory, this unit begins to starve. **(GUI)** A notification should be given to the player at the end of a turn if there is a unit left with no food items!

Starvation: a starving unit loses 25% default HPs per turn. So a healthy unit with maximum HPs will die if left for 4 turns without food. An injured unit will starve to death much quicker, depending on how many HPs does he/she have left.

food item & food value (FV)

Various food giving resources will have different food value(FV). They can also be combined and cooked in to more complex food items which then generally have higher food value. And the food value is just a variable to calculate if a unit can live one world map turn. So all food resources or (most) food items have a certain food value. Some food items will also have a minor special bonus effect while being consumed, while others will have only bonus effect, but no food value and will need to be actively consumed by the player from the units inventory.

Examples:  
1 wild berry = 1 FV  
1 potatoes = 2 FV  
1 rabbit = 2 FV  
1 rabbit-potato stew = 5 FV (cost: 1 rabbit, 1 potato; requires: pot)

How does the player decide which food item his unit eats from, if there is more than one food item in the units inventory?  
  
In the GUI(inventory)?

In the beginning of the game each unit has a one food default food item in the inventory. On the icon of this food item there is a small "mini" icon showing that this item is currently "eaten". By click the player can move the mini eat icon to another food item (or food resource) in the inventory if such is available.

# X:\Documents Toma\BEFORE LEGENDS\game loop\Food Inventory01.png X:\Documents Toma\BEFORE LEGENDS\game loop\Food Inventory02.png

**\*Camp, Tribal Camp, Village**

The **Camp** represents a quickly build shelter. Every unit can make a camp. There are no resources required. The only cost is time - 1 turn to set up, 0 turn to leave. In the camp some special commands may be given to the units in it:  
- rest  
- craft\*  
- cook\*

*\* not all items can be crafted in camps - more advanced items require village or tribal camp in order to be crafted. However a wide variety of basic items in all categories are available to the player to be crafted in simple camps.*

The player can have multiple camps at the same time.

The **Tribal Camp** is the main base for the player with nomadic game play. It represents a gathering ground for the whole tribe. It takes 1 turn to set it up and one turn to leave it. The player can have only 1 tribal camp at the same time. The Tribal camp requires no resources, however in order to be set up all units of the player need to be on the same tile.  
The "buildings" in the camp are defined on the carry slides (later wagons) of the tribesman - this means each tribe member can "unpack" and "pack" only one "building", because he/she can carry only one carry slide/wagon.

Commands for units in the tribal camp:  
- rest  
- craft  
- cook  
- pray to spirits  
- add new tribal member (population surplus)  
- change the function of carry slides/wagons

The **Village** is the main base for the player with settled game play. It takes 2 turns to build and 1 turn to leave. When abounded the units in the village receive carry slides *(without any specialization?!?!)*. When build, the village contains as buildings in it only houses (the simplest in case there will be different ones). The number of houses depends on the number of units that were building it. In order to build village the player needs to have all his/hers units on the same tile (this doesn't apply if the player decides to leave the village). The resources required to build the village depend on the number of houses that will be build. *NOTE: Should we have something like chieftains hut?*

Commands for units in the tribal camp:  
- rest  
- craft  
- cook  
- pray to spirits  
- add new tribal member (population surplus)  
- build buildings

**\*Resources**

Resources can be collected in the following ways:

* As **"loot"** from killed animals   
  *for example: Fur, Bone, "Special/Strong" Bone, Mammoth tusk, Teeth (? from special enemies), feathers, meet, chitin etc*.
* As collectables straight from the world map tile the unit is placed (cost 1 round) - **"Gather"**  
  *for example: food recourses (plants, roots, herbs, mushrooms), wood, stone as well as all metals  
  NOTE: for all non-plant recourses a special item can significantly increase the output (wood axe, pick axe etc.)*
* As the result from **Hunt** (cost 1 round) - "Hunt"  
  *for example: Fur, Bone, meet, etc*.
* From **Domesticated animals** if the player has a herd of something  
  *for example: meet, milk (? -NTH), fur etc.  
  NOTE Regarding* ***managing herds of domestic animals****:  
  herds will be controlled as units on the world map, they will probably need to be accompanied by at least one tribal unit; they will have a size limit, they will consume "grass resources" available across most tiles (not all though); the consumed grass on a tile is limited and when depleted the herd needs to move to another tile; The depleted Tile will recover in some time; the herd will have output of resources per round depending on the size of the herd; OPTIONAL: the player can slaughter animals from the herd thus receiving a lot of meet, but reducing the size of its hers and so the passive output of resources. The output of a herd appears in the inventory of the unit placed on the same map tile;*
* As the result from harvesting (cost 1 round) - **"Harvest"**  
  *for example: grain, vegetables etc*.  
  A field of domesticated plants needs first to be "planted" - cost 1 turn and requires a certain amount of this resource available in the inventory of the unit planting it. The player cannot plant domesticated plants on every tile (example: in forests, deserts, hills - no planting possible). Similar to grass depletion, the planted field will also be depleted and will NOT recover automatically - so the player needs to plant somewhere else again;   
  Can he just plant on the same tile?  
  this needs to be decided, maybe the tile needs to "recover" for some turns before it can be planted on again (???)
* NTH (!!!) From other NPC tribes, via simplified barter trade

**Output of resource collection**

All resources have a **default Quantity**. This variable contains the amount of resource units of the specific resource type which can be collected on the given World Map Tile for one round. After being collected the resource becomes depleted and will recover to its default Quantity in few rounds. The **recovery** of the resource is also a default value of each resource type.

The output quantity is modified randomly with each collect action. This modifier should be a +/- 50%.

The Unit can improve the output via:

* Unit skill perks
* Tribal Skill perks
* Tools

***NOTE on Output of resource collection****some production value resources should probably have visual representation on the world map with dedicated assets. They should also probably have higher default Quantity and recovery. So that one unit doesn’t collect the whole quantity on one collect attempt, but through harvest over several turns*

**IDEA: Harvest**  
some plants can be “planted” (in a Tile Around the village). The planting consumes a quantity of resource units equal to the default collect quantity of the particular plant resource. After N turns equal to the recovery turns of the resource a “field” of this plant appears on the tile it was planted on. The default Quantity in this planted “field” is 10x default Quantity of the resource. After being depleted, the resource has no recovery – so it needs to be re-planted in order to exist after depletion.  
Such plant field cannot be done on any map tile - we need requirements of the map tile (temperature, altitude, humidity, free of trees, next to a village). These requirements may differ between different resource types!   
The food resources available on the map tile of the plant field will be suspended with the planting action.

# Weapons Mechanics

**Main weapon categories**

1. Pierce

(such as: arrows, daggers, spears, swords\*)

Specialty: increase chances of Critical Strike significantly

2. Slash

(such as: axes, scimitars, swords\*)

Specialty: increase AS

3. Blunt

(such as: clubs, hammers, maces)

Specialty: can cause dazed effect to the opponent

**Main armor categories**

1. Body Armor

(all items equipped on the body)

Specialty: Increase A, but have penalty on AP

2. Head Armor

(all items equipped on the head)

Specialty: Increase A, but have penalty on AS/DS

3. Shield

(all shields)

Specialty: Increase DS (major) and A (minor), but have penalty on AS

**Other item types**

Items not fitting in the 2 main categories,

(such as: bows, tattoos, talismans, jewelry etc.)

\*about ranged attacks

Ranged attacks function in the same principal as melee attacks and have the same damage calculation formula, however they require additional weapon and skill variable - that is range.

**Range** of a weapon determents the amount of tiles between the skirmisher and the target in which the skirmishers attack will deliver 100% HPP. Each additional tile beyond the range between the skirmisher and the target will have 25% HPP penalty. This is called **ranged penalty**. After a certain distance this penalty is 100% - the target is out of range and no shot can be performed.

This ranged penalty will be shown as UI feedback to the player during battle and will vary between ranged weapon types significantly. With skill perks in ranged combat the player will have the chance to significantly influence the ranged penalty of a unit, thus improving massively the ranged performance of this unit. Experienced units in ranged combat will be much more efficient then others, not skilled in this area and the player will notice this in the game play.

\* Use of weapons

Weapons can be used either in one hand or in both hands. Some, such as most spears (short), can be used in both as well as in one. Using them with both hands will give AS bonus. If a weapon can be used in both hands and there is no item in the second hand, the both hands mechanic applies automatically.

Generally using additional weapon or shield on the second hand, will give AS penalty.

# Skills

(units)