ARPG –Agile Release Planning Game

Iteration planning extension – version 1.1 April 2010

A training game where participants experience the planning and running of iterations in an agile project.

The game

This extension is designed to work with the Agile Release Planning Game.

The wider game is designed to help participants understand the end to end process of release planning. This extension focuses on using a story wall to track work within the iteration.

The aim

The aim of this game is for colonists to build new features for use on the base.

To do so involves 3 steps

- Identify, find and assess the materials needed to construct the feature. These materials must be scavenged from the wreckage of the old base.
- Use these materials to build working features; and
- Test and install the features. This involves making sure they work as designed, do not leak and so forth.

The story wall

The game includes a story wall. The story wall is the tracking mechanism that teams in the real world use to track the progress of stories (or tasks or features) during the iteration.

This particular story wall has the following columns:

- **Salvage and analysis**. The stories where the team are salvaging useful materials.
- **Building.** The stories representing features currently under construction.
- **Testing and installation**. Stories representing features being tested and installed in the base.
- **Open for business**. Features that have already been deployed during this iteration.

Allocating velocity

The team's velocity represents the amount of work the team can get through in an iteration. For our purposes we will assume that each point of velocity is equivalent to one "resource" that the team can allocate to work.

The team can allocate their resources as they see fit between:

- Salvage and analysis;
- Building; and
- Testing and installation.

The resources can be allocated to different tasks each iteration. But must remain allocated to the same for the duration of the existing iteration.

So if two points are allocated to testing and there are no stories to test at some point in the iteration, then the team members working on testing sit idle for the day.

Determining the stories and velocity

The stories and the velocity for the iteration can be taken from any iteration in the main game. Alternatively, a base set is provided in the appendix to this extension.

Running each iteration

Set up and plan the iteration

Each iteration consists of 5 days, during which the team must move as many stories and defects as possible from the Salvage column to the Open for Business Column.

Place the stories in the salvage column

To begin, all the stories allocated to the iteration are placed in the salvage column.

Place the defects in Salvage and Build

Some defects require new materials to repair, while others only need "tinkering" to be fixed.

Place half of the defects to be worked on in the Salvage column and half in the Build column. If there is an odd number then place the remaining defect in the Salvage column.

Deploy the resources

The team are free to allocate the available resources to any column they choose.

For example, if the team has a velocity of 15, then they can allocate up to five resources to each of Salvage, Build and Test. There is no need to allocate any resources to "open for business" as there is no work to be done in this column.

Day one the salvage team

On the first day, the salvage team roll a die per point allocated to the salvage task. The number rolled represents the number of story points that the team can move into the Build column.

- Only complete stories (or defects) can be moved to the building column, no partial stories can be migrated.
- If there are no stories in the column then the team sit idle.
- However if there are both points and stories left at the end of the day then the team can carry the remaining points over to the following day.

For example if the team allocate two resources to salvage, they might roll a 4 and a 3 on their dice. So they can move 7 points worth of stories to the Build column. If the only stories they have are 5 point stories then they move one story to the building column and carry two points forward to the next day.

Day 1 – the other teams

The build and test teams repeat the process followed by the salvage team.

Note however that they cannot start work on stories that move into their column during the day. Instead they can only work on stories that are there at the beginning of the day.

Days two through five

The rest of the iteration continues in the same way as the first day.

Appendix A – Sample iterations

If the team do not have iterations to use from the wider game, then they can choose to run these ones.

Iteration 1

Velocity: 15 points. Defects to fix: 4 points

Stories available: Air generator (5 points, story 1); Basic accommodation unit (2 points, story 2); Mars Rover (3 points, story18); Mars Lander Communications (3 points, story 19d); Generator (8 points, story 10)

Iteration 2

Velocity: 18 points. Defects to fix: 8 points

Stories available: Any remaining from iteration 1; Hospital (5 points, story 11); Basic Karaoke machine unit (1 points, story 14); Luxury accommodation (13 points, story16); Mars Lander CPU (5 points, story 19e); Training unit (8 points, story 31)

Iteration Story wall for iteration _____. Available velocity: _____

Salvage and analysis	**Build**	**Test and installation**	**Open for business**
Resources allocated:	Resources allocated:	Resources allocated:	Resources allocated: Nil

Defect counters for use on the Iteration story wall. These can be used to track individual defects during the iteration:

Defect 1 SP	Defect 1 SP	Defect 1 SP	Defect 1 SP	Defect 1 SP	Defect 1 SP	Defect 1 SP	Defect 1 SP
Defect 1 SP	Defect 1 SP	Defect 1 SP	Defect 1 SP	Defect 1 SP	Defect 1 SP	Defect 1 SP	Defect 1 SP
Defect 1 SP	Defect 1 SP	Defect 1 SP	Defect 1 SP	Defect 1 SP	Defect 1 SP	Defect 1 SP	Defect 1 SP