

DEADLINES		Completed <input type="checkbox"/>
January 8, 2014	Indev Completed	✓
January 15, 2014	Alpha Completed	✓
January 18, 2014	Beta Completed	✓
January 20, 2014	Goal Deadline	✓
January 21, 2014	Hard Deadline	✓
January 23, 2013	Hand –In Date	✓

ROLES AND DESCRIPTIONS

Responsible Sections

Alston: Classes that affect the overall game flow/code structure (Game, Map, ect.)

Alston and Koko: class Cell and its subclasses, as well as class Map

Daniel and James: class Unit and its subclasses, as well as class Player

Jesmin: Classes that affect the overall look of the game, such as panel placement and sizes (ex. ActionsPanel, StatisticsPanel, ect.), along with the artistic assets of the game

Roles

Alston Lin: Chief Software Architect - Decides on general structure of the Objects in the program (“The bigger picture”) by controlling the interaction between major classes (ex. Cell and Map, Cell and Unit, ect.)

Daniel Chung: Lead Game Designer - Focuses on the strategies of the game (ex. Units strengths and weaknesses, stats, balancing, ect.) along with the AI for the bots

Jesmin Hondell: Lead Artist - Focuses on the overall look and feel of the game, the build quality and user experience

Koko Deng: Head Secretary - Records any progress, version changes and focuses on proper documentation of code (javadocs), class diagrams, along with the standards

James Ly: Quality Control Lead - Tests the program for quality, recommends any changes, records any bugs and debugs them.

CODING AND DOCUMENTATION STANDARDS

Please follow the following coding format (Including brackets, whitespace, ect.) and documentation format (grammar, annotations, information included, ect.) in all your code:

Examples

Getters:

```
/**
 * @return The new age of this Player (1, 2, or 3 ONLY)
 */
public void setAge(int age) {
    this.age = age;
}
```

Setters:

```
/**
 * @return The new age of this Player (1, 2, or 3 ONLY)
 */
public void setAge(int age) {
    this.age = age;
}
```

*Notice how all Player is capitalized as it is an Object type name

Please note that the coding and documentation standards do not apply only to getters and setters, but every single line of code you write as well. In addition, please remember to do single line comments (ex. //If the Cell exists) as frequently as you can, where applicable and not self-evident.

ARTISTIC ASSET REQUESTS

This section is for requests to the Lead Artist to create an artistic asset (image or music), please fill in the table below.

Date requested (DD/MM/YYYY)	Requested by	Description	Dimensions *	Completed? (filled by Artist)
19/12/2013	Alston Lin	A thin frame that will be a border for the map (THIS IS NOW JUST A BOX)	1280 * 500	done
	Alston Lin	A panel that will display statistics	718 * 40	done
	Alston Lin	A panel that will contain the Minimap	563 * 220	done
	Alston Lin	A panel that will contain Buttons to perform actions	718 * 180	done
	Alston Lin & Koko Deng	A house (Medieval, Colonial and Modern styles)	64 * 64	done
	Alston Lin & Koko Deng	Center (Medieval, Colonial and Modern styles)	64 * 64	done
	Alston Lin & Koko Deng	Grass	64 * 64	done
	Alston Lin & Koko Deng	Tree	64 * 64	done
	Alston Lin	An up and down arrow (that will have + and - respectively on it), used to zoom in and out of the map	16 * 32	done
	Koko Deng & Alston Lin	Water	64 * 64	done
	Koko Deng & Alston Lin	Wall	64 * 64	done
	Koko Deng & Alston Lin	Berry Bush x 2	64 * 64	done

War of the Ages (Documentation) by Alston Lin, Koko Deng, Jesmin Hondell, Daniel Chung and James Ly

		Note: just change the colour of the berries, to make two types of berries		
	Koko Deng & Alston Lin	Goldmine Note: pretty much a hole/entrance looking thing	64 * 64	done
	Koko Deng & Alston Lin	Workshop (Medieval, Colonial and Modern styles)	64 * 64	done
	Koko Deng & Alston Lin	Stable (Medieval, Colonial and Modern styles)	64 * 64	done
	Koko Deng & Alston Lin	Barracks (Medieval, Colonial and Modern styles)	64 * 64	done
30/12/2013	Koko & Alston	Destroy Building button	64 * 64	done
30/12/2013	James & Daniel	Suicide Button for Units	64 * 64	done
	James & Daniel	bullet & arrow	bullet(8x8) arrow(16x16)	done
11/01/13	Koko & Alston	Construction site (Medieval, Colonial and Modern styles)	64*64	done
	Koko & Alston	Food icon (used for i.e. how much food there is)	16*16	done
	Koko & Alston	Gold icon	16*16	done
	Koko & Alston	Wood icon	16*16	done
	Koko & Alston	Population icon	16*16	done
	Koko & Alston	Selection ring (like glowing colour), flat (sort of like a shadow)	64*64, width be 64, but height be small	done
	James & Daniel	Spearman	64*64	done
	James & Daniel	Swordsman	64*64	done

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	James & Daniel	Pikeman	64*64	done
	James & Daniel	Sniper	64*64	done
	James & Daniel	Colonial Archer	64*64	done
	James & Daniel	Musketeer	64*64	done
	James & Daniel	Rifleman	64*64	done
	James & Daniel	Knight	64*64	done
	James & Daniel	Lancer	64*64	done
	James & Daniel	Horseman	64*64	done
	James & Daniel	RPG	64*64	done
	James & Daniel	Tank	64*64	done
	James & Daniel	Mounted Archer	64*64	done
	James & Daniel	Dragoon - A horseman armed with a pistol	64*64	done
	James & Daniel	Battering Ram	64*64	done
	James & Daniel	Cannon	64*64	done
	James & Daniel	Mortar	64*64	done
	James & Daniel	Catapult	64*64	done
	James & Daniel	Organ Gun	64*64	done
01/14/14	Koko & Alston	Age Up button	64*64	done
01/15/14	Koko & Alston	Panel that displays information	718 * 40	done
	Koko & Alston	Title screen (Include the title, our names and space for the play and instruction buttons)	1280 * 720	done
	Koko & Alston	New Game button for the title screen	To the artist's discretion	done
	Koko & Alston	Load Game button for the title screen	To the artist's discretion	done

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	Koko & Alston	Instructions button for the title screen	To the artist's discretion	done
	Koko & Alston	Save game button	128 * 32	done
	Koko & Alston	Main menu button (go back to main menu)	128 * 32	done
	Koko & Alston	Game options panel (Where the save game and main menu buttons will go)	563 * 40	done
	Koko & Alston	Cannon Ball	8 * 8	done
	Koko & Alston	Victory message/sign (what shows the user that they've won the game)	To the artist's discretion	done
	Koko & Alston	Defeat message/sign	To the artist's discretion	done
	Alston	Multiplayer Host Game button(will show on title screen)	To the artist's discretion	done
	Alston	Multiplayer Join Game button (shown on title screen)	To the artist's discretion	done
	Alston	Back Button (Like the arrow) (will be shown in the Multiplayer Room)	To the artist's discretion	done
	Alston	Multiplayer Room background (while waiting for others before the game)	1280 * 720	done
	Alston	Start Game button(will be shown in the Multiplayer Room)	To the artist's discretion	done
	James	Civilian (Normal worker)	64 * 64	done

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1/22/2014	Koko	Colonial Archer >left >right >back image	64 * 64	done
	Koko	Please resize new game, join game, load game, host game buttons to be the same size	-	done
	Alston	Change the new game and menu buttons (have an icon instead of the text "New" or "Menu", font of the author names on the title screen	-	done

AGENDA

Indev 1.0 December 19, 2013

- ☐ Project Introduced
- ☐ Theme chosen, roles split
- ☐ Basic game structure and basis decided

Alston: Create basic framework for the game based on ideas from a group discussion

Indev 1.1 December 24, 2013

- ☐ Empty classes for all the necessary Objects were made and time mechanism was added.
- ☐ General game strategies and design discussed and decided
- ☐ Google drive documents created, class diagrams created

Alston: Finish Framework

Koko: Create the paperwork and planning for the project, such as class diagrams, logs, agenda, deadlines, etc.

Alston & Koko: Start working on the basic structure of class Cell and the User Interface

Jesmin: Start making pictures using Flash

Daniel: Modify the current pathfinding algorithm for Unit to Cell so it will take into consideration obstacles that may not have been there before. Also, add another algorithm for Unit to Unit (which will be moving). Hint: Re-call the current algorithm as an inefficient possibility

Daniel & James: Implement the basic structure in the subclasses of Unit and create subclasses for Unit (decide on what Units there should be)

Indev 1.2 January 1 2014

Alston & Koko: Create the basic interface (Buttons) for the class Cell, setup subclasses for Cell, and finish the User Interface (unit selection)

Jesmin: Work on art and implement them into the project; attempt to account for facing directions

Daniel and James: Do the work that was supposed to be done in Indev 1.1 (Deadline missed with no work completed)

Indev 1.3 January 5, 2014

Alston & Koko: Create the base for all the subclasses of Cell, along with the appropriate buttons and statistics information

Jesmin: Implement the art into the project, and help out Daniel and James when needed

Daniel & James: Work on the interface (Buttons) for Units that will be shown when it is selected, the statistics variables (damage, health, speed, range, etc.) for every Unit, and work on class Player and finish pathfinding algorithms

Indev 2.0 January 6 2014

Alston: Take over pathfinding in Unit (not completed)
James, Jesmin and Daniel: Do all uncompleted tasks from Indev 1.3 except for pathfinding, as well as implement the interface Selectable
Koko: Work on class diagrams, documentation, code neatness and game proposal
Jesmin: Work on the unfinished art
Daniel: Make a spreadsheet that contains all the Units and Cells along with all relevant information/statistics of them

Indev 2.1 January 7 2014

James, Jesmin and Daniel: Do the work that was supposed to be done in Indev 2.0
Daniel: Finish the spreadsheet
Alston and Koko: Finish the implementation of Buttons for all Cells

Indev 2.2 January 8 2014

James, Jesmin and Daniel: Create the API (ex. adding and removing resources, what Buildings everyone owns, ect.) for Player, add all the statistics from the spreadsheet to all Units, finish the implementation of interface Selectable (Buttons and Information methods), try to create the basic framework for attacking, collection resources, etc.
Alston and Koko: Implement all the statistics from the spreadsheet & have them shown on the InformationPanel and the API for all Cells (ex. harvesting resources)

Alpha 1.0 January 9 2014

James and Daniel: Do the work the uncompleted work from Indev 2.2 (everything except for statistics)
Daniel: Start the basis for the AI
Koko: Help Daniel and James implement displaying statistics onto Information Panel when a Unit is selected
Jesmin: Finish all the uncompleted art that have been requested and implement them to the code
Alston: Work on the “age up” function

Alpha 1.1 January 10 2014

James, Jesmin and Daniel: Work on basic framework for Player AI, work on the functional interactions for Units (attacking, harvesting resources, etc.)
Jesmin: Add all the images created to the code
Alston and Koko: Work on aging up and consuming resources
Alston: Fix all major bugs, detect and fix any minor bugs, make the UI look nicer
Koko: Cleanup the code

Alpha 1.2 January 13 2014

James & Jesmin: Continue working on functional interaction between Units
Daniel: Start working on class AI
Alston: Fix up all bugs, implement minor features (ex. statistics panel), help with the functional interaction between Units
Koko: Implement a spawning queue, resource check and consumption for spawning and different spawns for separate ages, implement spawn button images, resource check and

consumption for creating buildings, work on popup messages
Jesmin: Do the art that has been requested

Alpha 1.3 January 14 2014

James: Finish the functional interaction between Units
Daniel: Continue working on AI
Koko: Finish everything in Cell, change the button images ----> set their names, check over javadocs of all other classes
Alston: Make the Minimap and hovering option
Jesmin: Work on the art

Alpha 2.0 January 15 2014

Alston: Finish minimap, do James' uncompleted work from Alpha 1.3
Koko: Create API in Cell + subclasses for the AI
James: Create the API in Unit + subclasses, create functionality for Units to attack buildings
Daniel: Work on AI
Jesmin: Work on the art

Beta 1.0 January 16 2014

Alston: Allow for fast map scrolling with Minimap, begin Serialization implementation
Jesmin: Make attack animations along with the various facing directions
Koko: Work on aging up (hides the aging up button while it ages it, consume resources, have a timer i.e. 30s)
James: Work on ranged attacks (projectiles), unit selection and healthbar, and fix bugs on the list, implement all the animations to the game
Daniel: Work on AI

Beta 1.1 January 17 2014

Alston: Finish Serialization and De-serialization, try implementing multiplayer
Jesmin: Finish ALL images needed
Koko: Make the title screen, finish implementation of different Building images for different ages, clean up code
James: Do the tasks from Beta 1.0 (all uncompleted)
Daniel: Finish the AI

Beta 2.0 January 19 2014

Alston: Finish multiplayer lobby, start working on the multiplayer server-client architecture and communication (Request for client and Update for server)
Jesmin: Finish uncompleted art
Koko: Finish various uncompleted features (implement art in buttons, changing images for aging up, etc.). Update class diagrams, look through code to ensure javadoc format. Print javadocs.
James: Do the tasks from Beta 1.0 (all still uncompleted)
Daniel: Finish AI (overdue)

Beta 2.1 January 20 2014

Alston: Finish multiplayer implementation

Jesmin: Create the requested art

Koko: Implement population counts (housing) and end-game (win or lose when someone's center is destroyed)

James: Fix bugs, show unit selection, fix facing directions, implement different projectiles for different: Units

Daniel: Finish AI (overdue)

Beta 2.2 January 21 2014

Alston and Koko: Test the Game for bugs, implement any minor features needed

Jesmin: Fix all the Unit images that do not have a proper front, back, left and right image

James: Fix bugs, redo facing direction function for Unit, implement selection highlighting

Daniel: Finish AI (overdue)

1.0 January 22 2014

Alston and Koko: Debug the game, clean up code, check over javadocs, class diagrams, flowchart

James: Implement selection highlighting, fix the attacking bugs, test game for any bugs

Daniel: Finish AI (overdue), test the game and balance all stats

Jesmin: Do the art-changes that were requested

KNOWN BUGS

All known bugs should be recorded here

Discovered by	Version Discovered	Description (include the specific method if known)	Fixed by	Version Fixed
Alston Lin	Indev 1.0	Greenfoot spazzes out on when the number of cells is 128 x 64. Workaround: reduce number of Cells	Alston	Indev 1.1
James Ly	Indev 2.0	The selection of the units will not work if the drawOrder Method in the World places the image used for the border over the cells Workaround: Divide image to 4 smaller ones to avoid collisions	Alston, Jesmin	Indev 2.1
James Ly	Indev 2.2	Moving a unit to itself or setting it to follow another unit will cause a nullpointerexception	Alston	Indev
James Ly	Indev 2.2	The Selectable would not detect any units over a cell when clicked on Fix: First check to see if there is a Unit, and if there is, do not Check for a Cell	James	Indev 2.2
James Ly	Alpha 1.0	The Selectable would not deselect	Alston	Alpha 1.2
Koko Deng	Alpha 2.0	Destroy button is still there even when something is removed	Alston	Beta 2.0
Alston Lin	Alpha 2.0	A Building can be built on a Cell that has a Unit on it (make this not possible)	Alston	Beta 2.0
Alston Lin	Alpha 2.0	Occasionally when a Unit follows another Unit and is in range to attack, the following Unit will move up/down or left/right	James	Beta 2.0
Alston Lin	Alpha 2.0	Popups would occasionally not disappear when supposed to	James	Beta 2.0
Alston Lin	Alpha 2.0	Selector does not deselect when a left click followed by a right click is performed	Alston	Beta 2.0
Alston Lin	Beta 1.1	Error when a Cell that a Unit is		

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		currently on path to has changed		
Alston Lin	Beta 2.0	Multiplayer sockets won't close properly (possibly due to Greenfoot itself)	Alston	Beta 2.0
Alston Lin	Beta 2.0	Popup does not disappear when the user clicks on the Button	James	Beta 2.1
Alston lin	Beta 2.0	Multiplayer Cell Change Spawn Point reference bug	Alston	Beta 2.0
Alston Lin	Beta 2.0	Buttons show on OptionsPanel when a enemy Cell or Unit is selected, allowing them to spawn things for the other Player	Koko	v1.0
James	Beta 2.0	The user can make enemy units and buildings self destruct	Koko	v1.0
Alston Lin	Beta 2.2	Set the target and targetBuilding to null when they do not exist in the World for Units when attacking	Daniel	Beta 2.1
Alston	v1.0	Greenfoot will occasionally freeze (GC?)	Alston	Beta 2.1