Beyond Graphics: Reaching the Visually Impaired Gamer

Brandon Cole, Ian Hamilton, Jonathan Hersh, Alex Macmillan, Brian Schmidt

GAME DEVELOPERS CONFERENCE 2014
SAN FRANCISCO, CA
MARCH 17–21, 2014
EXPO DATES: MARCH 19–21

Ian Hamilton

UX designer & accessibility specialist

@ianhamilton_

Accessible Zombies, Run 2
Why and How

Alex Macmillan
Lead Developer, Six to Start (2011-2013)
Now Mobile Engineer, Intuary
@arexx

KICKSTARTER Discover great projects Start your project BLOG HELP SI

ZOMBIES, RUN! Running game & audio adventure f iOS/Android

A Video Games project in London, United Kingdom by Six to Start and Naomi Alderman • send message

PROJECT HOME | UPDATES 5 | BACKERS 3464 | COMMENTS 196

Like Alex Macmillan, Matt Wieteska and 26,845 others like this. Tweet EMBED http://kck.st/rf2CRI

ABOUT THIS PROJECT

3,464 BACKERS

$72,627 PLEDGED OF $12,500 GOAL

0 SECONDS TO GO

FUNDING SUCCESSFUL

This project successfully raised its fun goal on October 10.

PLEDGE $1 OR MORE

102 BACKERS

The dead can't donate: Get yo the SURVIVOR'S Register in th credits! You'll also receive our thanks for not being a soulless

JOLLY ALPHA FIVE NINER

0.06	08:07	-:--
KM	TIME	PACE (KM)

Incoming transmission
Escaping the Crash Site 12:05

Item collected
Book 12:02

Item collected
Tinned Food 12:02

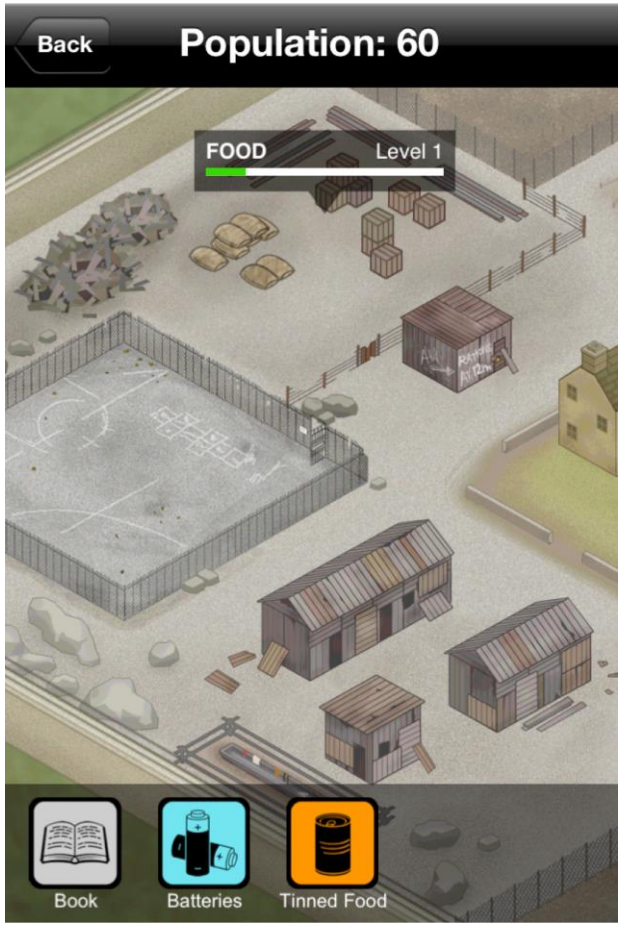
Item collected
Batteries 12:02

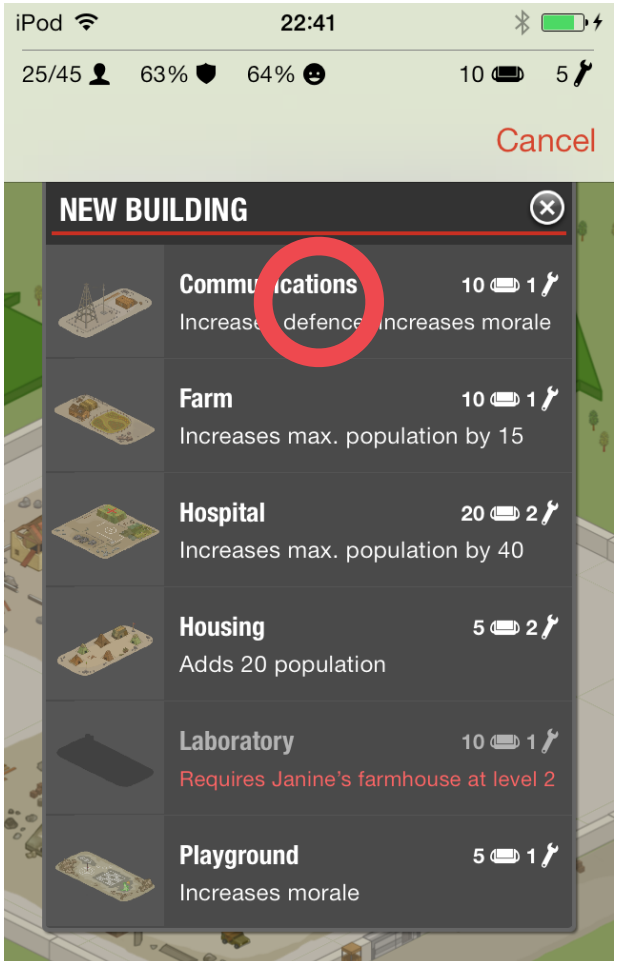
Incoming transmission
Survived the crash. 11:58

Pause | Replay Clip | Stop Mission

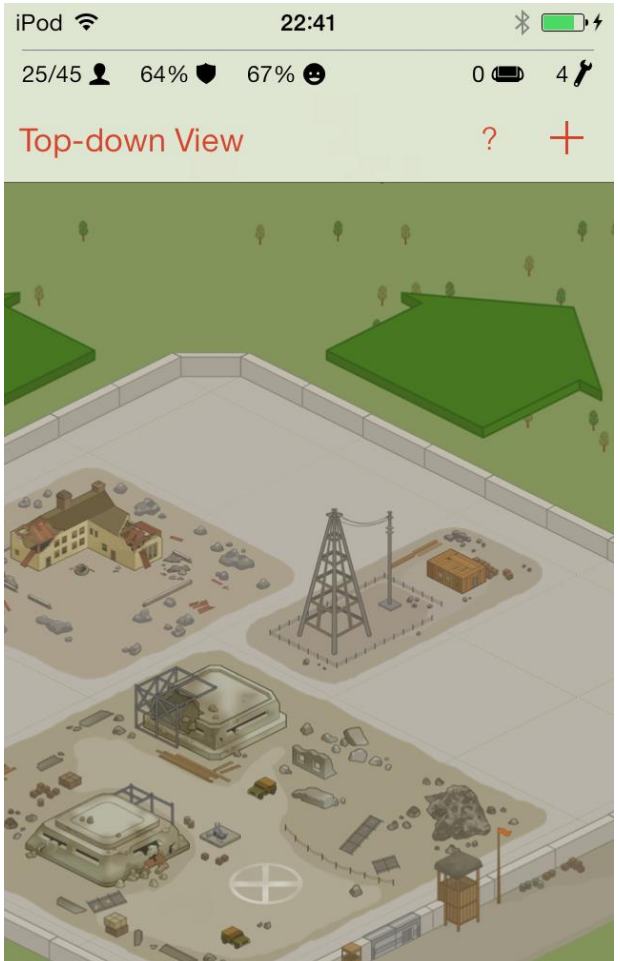
Back
Population: 60
FOOD
Level 1
Book
Batteries
Tinned Food

Back
Population: 60
FOOD
Level 1
Book
Tinned Food


Back
Population: 60
FOOD
Level 1
Book
Batteries
Tinned Food


iPod
22:41
25/45
63%
64%
10
5
Cancel
NEW BUILDING
Communications
10 1
Increases defence, increases morale
Farm
10 1
Increases max. population by 15
Hospital
20 2
Increases max. population by 40
Housing
5 2
Adds 20 population
Laboratory
10 1
Requires Janine's farmhouse at level 2
Playground
5 1
Increases morale

iPod
22:41
25/45
63%
64%
10
5
Cancel
Drag and drop to place


iPod
22:41
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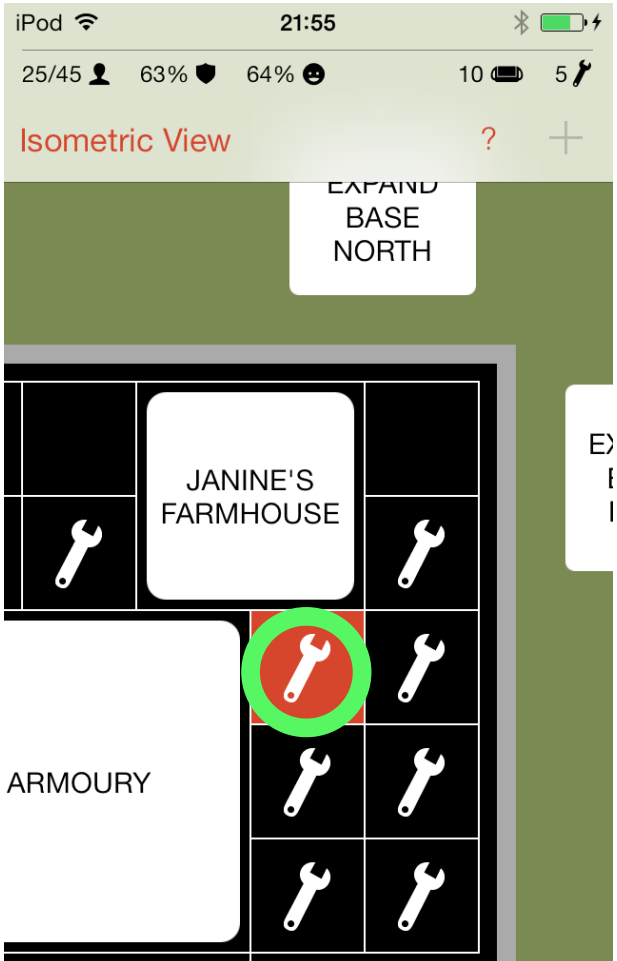
4
Top-down View
?


iPod
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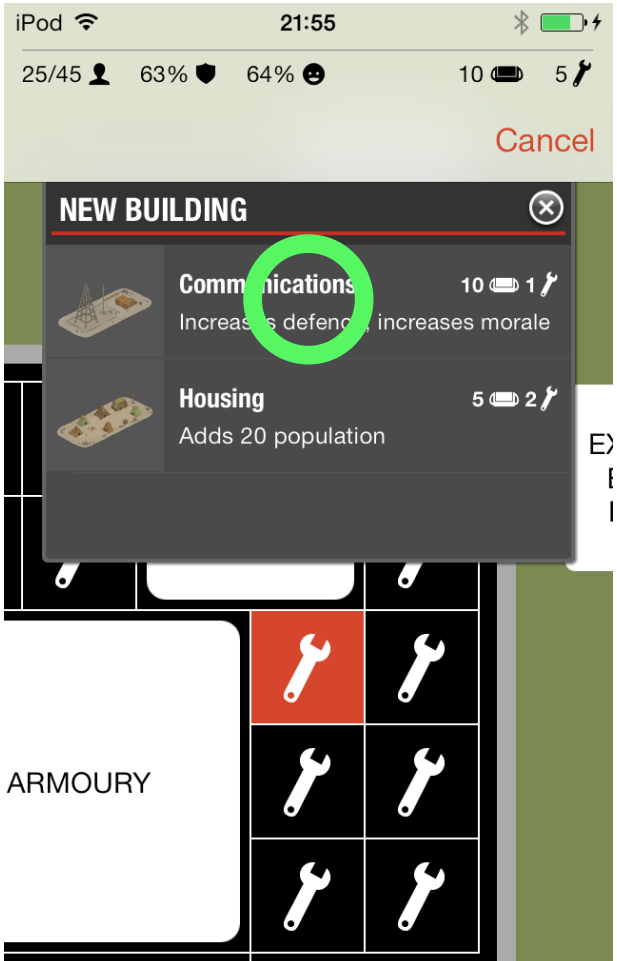
10
5
Isometric View
?
EXPAND BASE NORTH
JANINE'S FARMHOUSE
ARMOURY


iPod
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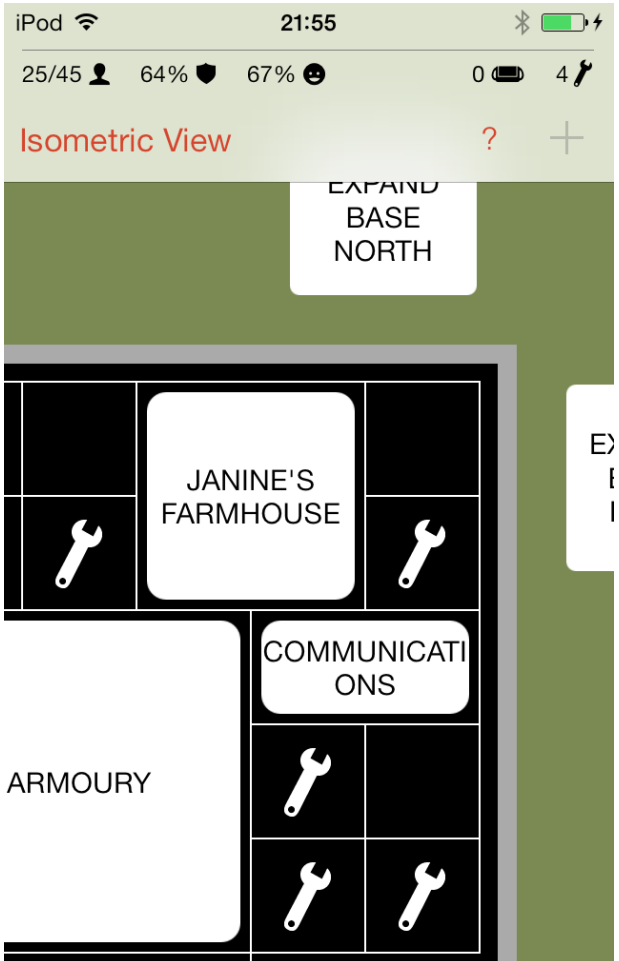
10
5
Cancel
NEW BUILDING
Communications
10 1
Increases defence, increases morale
Housing
5 2
Adds 20 population
EXPAND BASE NORTH
JANINE'S FARMHOUSE
ARMOURY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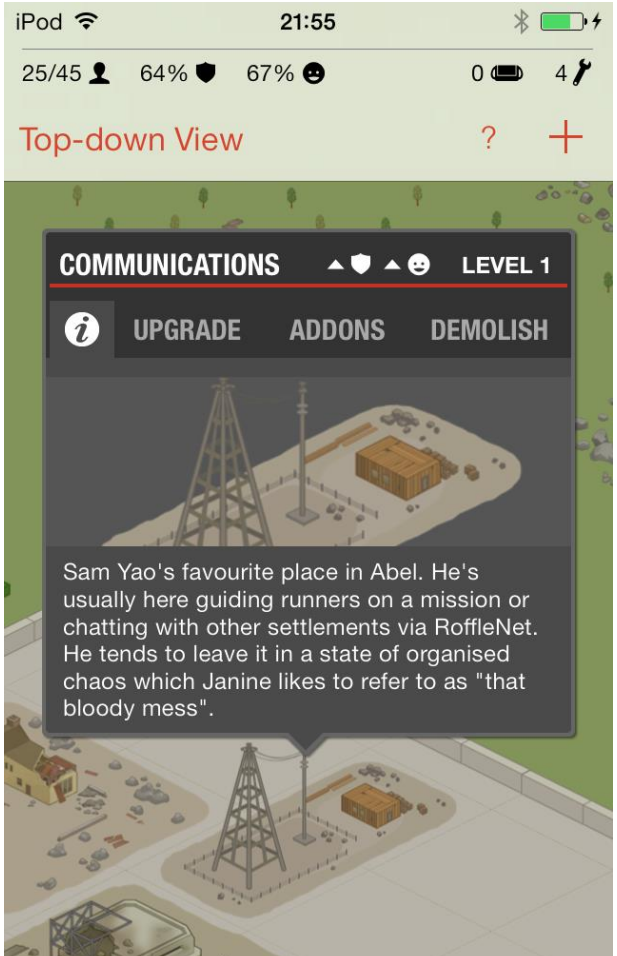
4
Isometric View
?
EXPAND BASE NORTH
JANINE'S FARMHOUSE
COMMUNICATIONS
ARMOURY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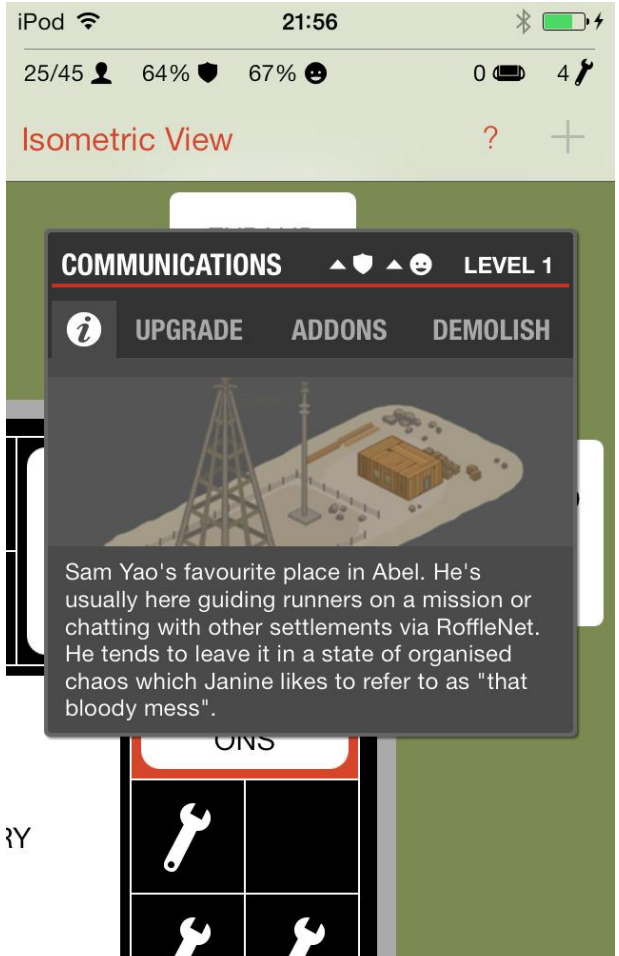
4
Top-down View
?
COMMUNICATIONS
LEVEL 1
UPGRADE
ADDONS
DEMOLISH
Sam Yao's favourite place in Abel. He's usually here guiding runners on a mission or chatting with other settlements via RoffleNet. He tends to leave it in a state of organised chaos which Janine likes to refer to as "that bloody mess".


iPod
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67%
0
4
Isometric View
?
COMMUNICATIONS
LEVEL 1
UPGRADE
ADDONS
DEMOLISH
Sam Yao's favourite place in Abel. He's usually here guiding runners on a mission or chatting with other settlements via RoffleNet. He tends to leave it in a state of organised chaos which Janine likes to refer to as "that bloody mess".

@jhersh

MUDRammer - A Modern MUD Client

so ANSI

wow

> cast cloak of clouds

A cloak of clouds billows up from the ground, enveloping you completely.

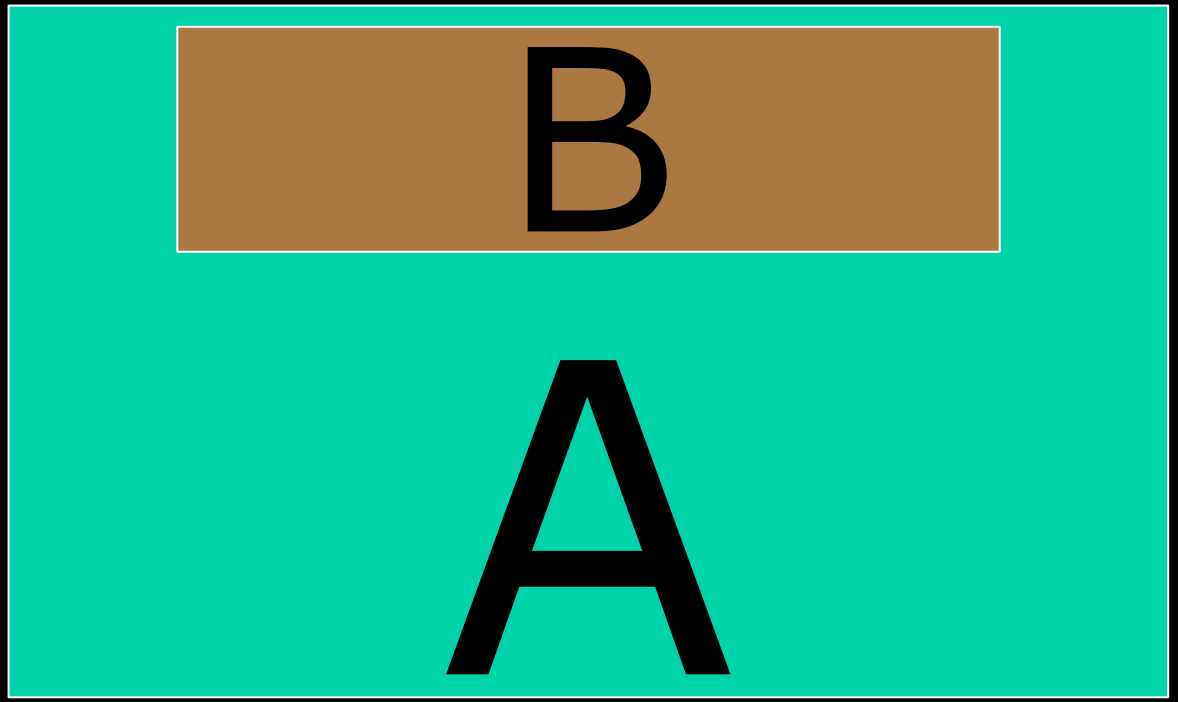
A baby wuzzie is here.

> cast bolt of thunder at baby

You point a finger at the baby wuzzie, and there is a brief crackle of electricity, followed immediately by a deafening bolt of thunder that rips it limb from limb.
You disintegrate the baby wuzzie.
You kill the baby wuzzie.

never gonna give you up
never gonna let you down

Your cloak of clouds swirls restlessly.
Your cloak of clouds swirls restlessly.
Your cloak of clouds swirls restlessly.
Your cloak of clouds blows away,
leaving you feeling VULNERABLE!!!


B
A

github.com/splinesoft/SSAccessibility

applevis.com

Brian Schmidt

Design Goals

- Audio-only game with specific ‘niche’ market targets
- 3D audio nerds
- Gamers with visual impairments

Audio Only Game

- Natural for gamers with visual impairments, right?
- Made some bad assumptions.
- But they were easy to correct

Good assumption 1: The iOS Accessibility API's are pretty easy to use

- Quite straightforward to add basic accessibility

Bad assumption 1: Assuming I can emulate the blind experience

- Playing the game blindfolded is not emulating the experience of a visually impaired player

Good Assumption 2: User feedback would be helpful

- The visual impaired gamer community is a great community and (thus far) seems to be troll-free..

Bad assumption 2: Sightless Players will “get it”

- Had added visual hints for sighted players
- Quickly learned I need analogous hints for blind gamers

Good Assumption 3: Use Siri voice for ‘help’

- Siri is a known entity, so it felt natural to use it in-game appropriately
- iOS 7 Voice API’s make it even easier

Bottom line

- Knowing how blind gamers interact with their devices is key
- Small additions (even to an audio only game) made objectives easier to understand for the VI community

Brandon Cole
@superblindman
I'm just an average blind dude who likes his video games, his music, and his books, and loves his fiance.
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