

SoundSearch

User Manual

Introduction:

SoundSearch is a buddy that helps grade 6 students with their spelling. A student is presented with a list of spoken words, and they have to find them in a word search. As the students gets better at the game, the words become harder. Eventually, all words in the grade six curriculum are fair game.

Level Progression:

A level is comprised of 40 words. When a student begins a word puzzle, 5 of those words are randomly chosen and placed inside the puzzle. Students progress to the next level when they achieve a threshold time for the lower level. If a student's time for their current level goes above 10 minutes, then the level is “failed” and students return back to the next lowest level. Failed and cancelled games do not count toward the student's scores.

Word List:

These words are not final. A spelling text will be available to me on Monday, and at that point many words may change. (words are now based off my sister's assignment sheets)

Level 1:

geography	glacier	tomato	motto
arctic	mountain	mosquito	patio
equator	horizon	torpedo	soprano
latitude	compass	potato	piano
longitude	ocean	tornado	banjo
continent	temperature	hero	trio
country	polar	buffalo	studio
antarctic	landscape	echo	radio
tropical	coordinates	volcano	ratio
arid	region	mango	rodeo

Level 2:

wrote	shoulder	almost	awful
wreck	boulder	already	useful
wrestle	yacht	although	careful
answer	column	altogether	fearful
kneel	knead	welcome	graceful
yolk	debt	welfare	hopeful
guide	folk	until	skillful
thumb	guard	delightful	thankful
plumber	rhythm	powerful	watchful
tongue	wharf	beautiful	wonderful

Level 3:

description	collection	cruise	mushroom
tablespoon	decision	monsoon	recruit
permission	confusion	cartoon	fewer
composition	excursion	division	renew
population	extension	coupon	skewer
multiplication	occasion	wound	review
imagination	admission	youth	barbecue
information	discussion	group	avenue
expression	fashion	rescue	continue
vaccination	cushion	argue	tissue

Level 4:

available	possible	serious	nervous
enjoyable	flexible	curious	famous
comfortable	horrible	envious	jealous
reasonable	suitable	various	dangerous
forgivable	incredible	ambitious	marvelous
probable	edible	precious	tremendous
remarkable	visible	conscious	fabulous
impossible	sensible	suspicious	generous
responsible	capable	delicious	enormous
valuable	legible	anxious	humorous

Level 5:

chase	surface
false	bounce
sense	palace
dense	disgrace
verse	pronounce
release	announce
grease	ambulance
purchase	convince
increase	fierce
expense	pierce

Level 6:

Level 4 and 5

Level 7:

Levels 3 – 5

Level 8:

Levels 2 – 5

Level 9:

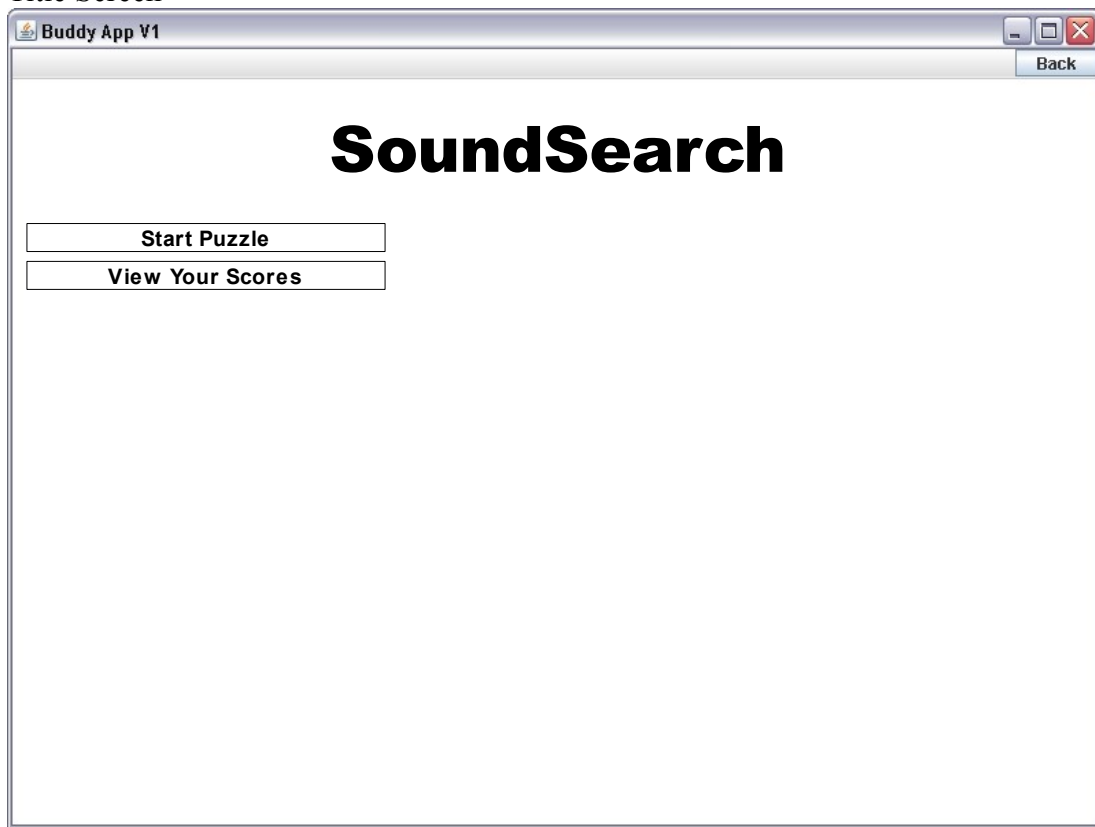
Levels 1 – 5

Requested BuddyLibrary Changes:

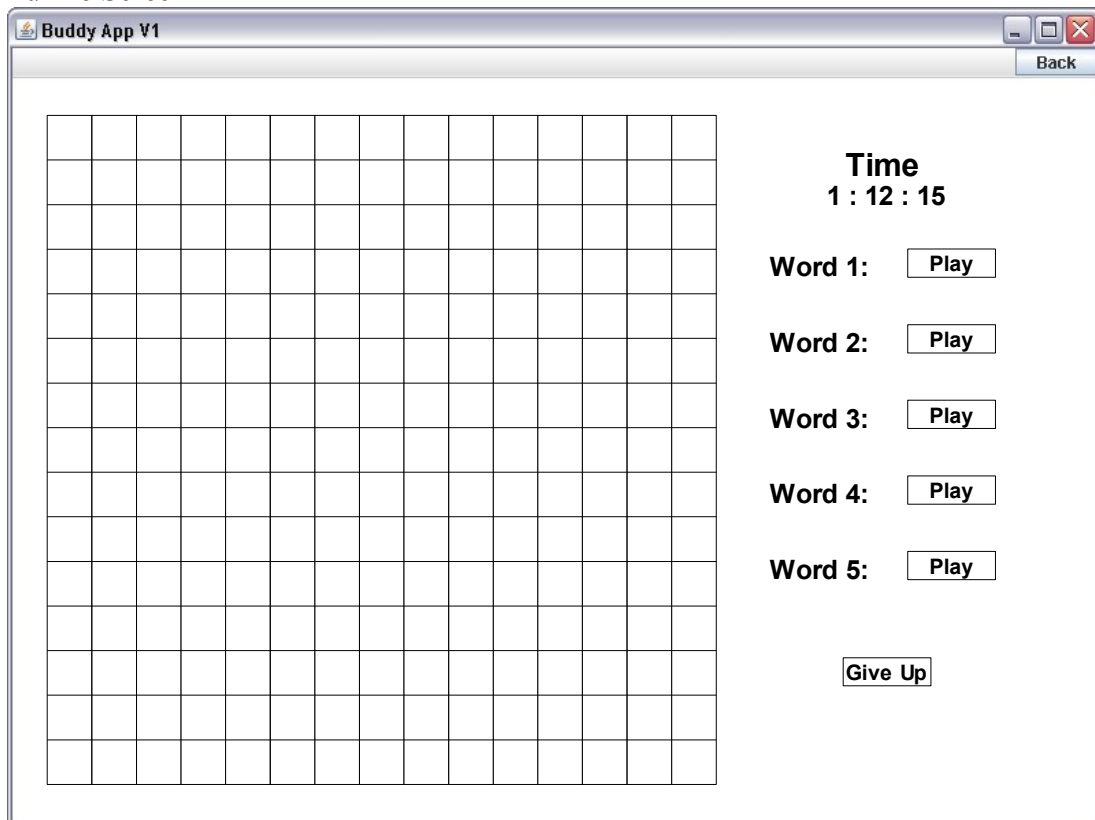
1. BarGraph
 - Ability to access biggest data value
 - Ability to access smallest data value
 - Ability to access average data value
2. Stats
 - Add the ability to display time numbers as minutes:seconds:milliseconds (time will just be an int representing the total time in milliseconds)
3. Buddy
 - Add function to store additional buddy data in a binary file
 - Add function to retrieve additional buddy data from a binary file
4. Other
 - The ability to use other .class files in a buddy (putting this all in 1 .java file will be extremely painful)

GUI Design:

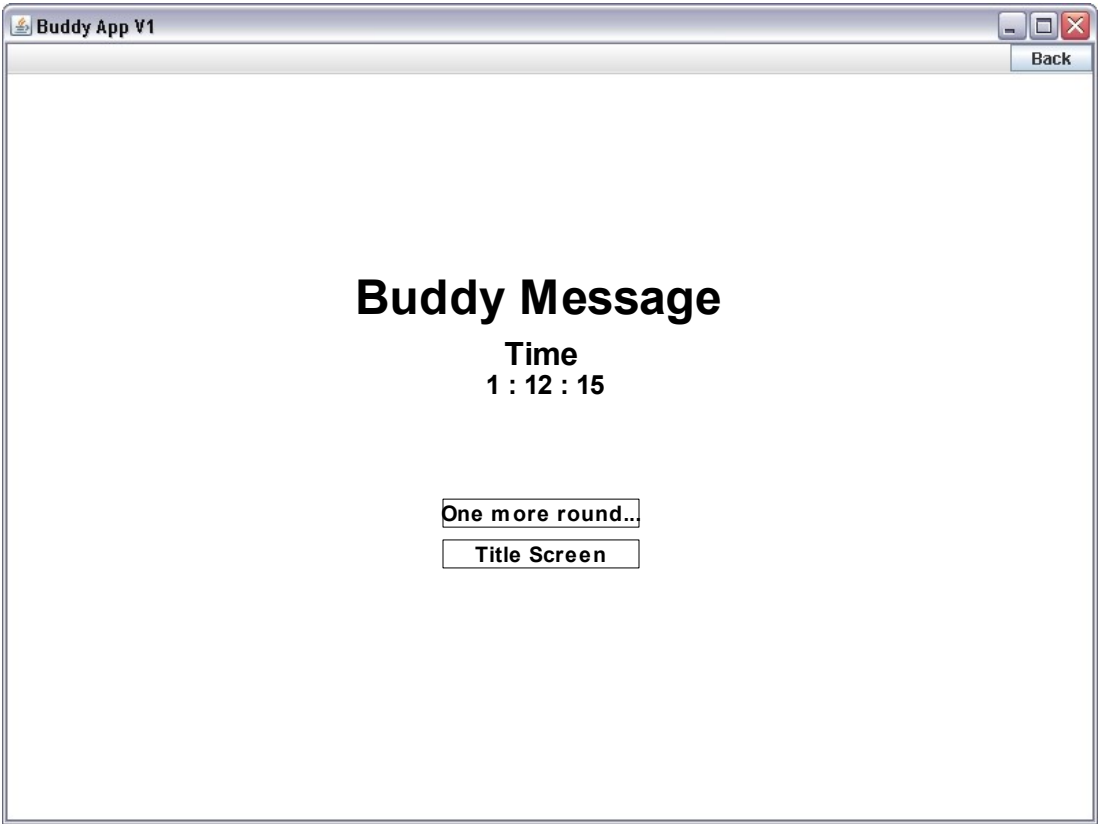
Title Screen



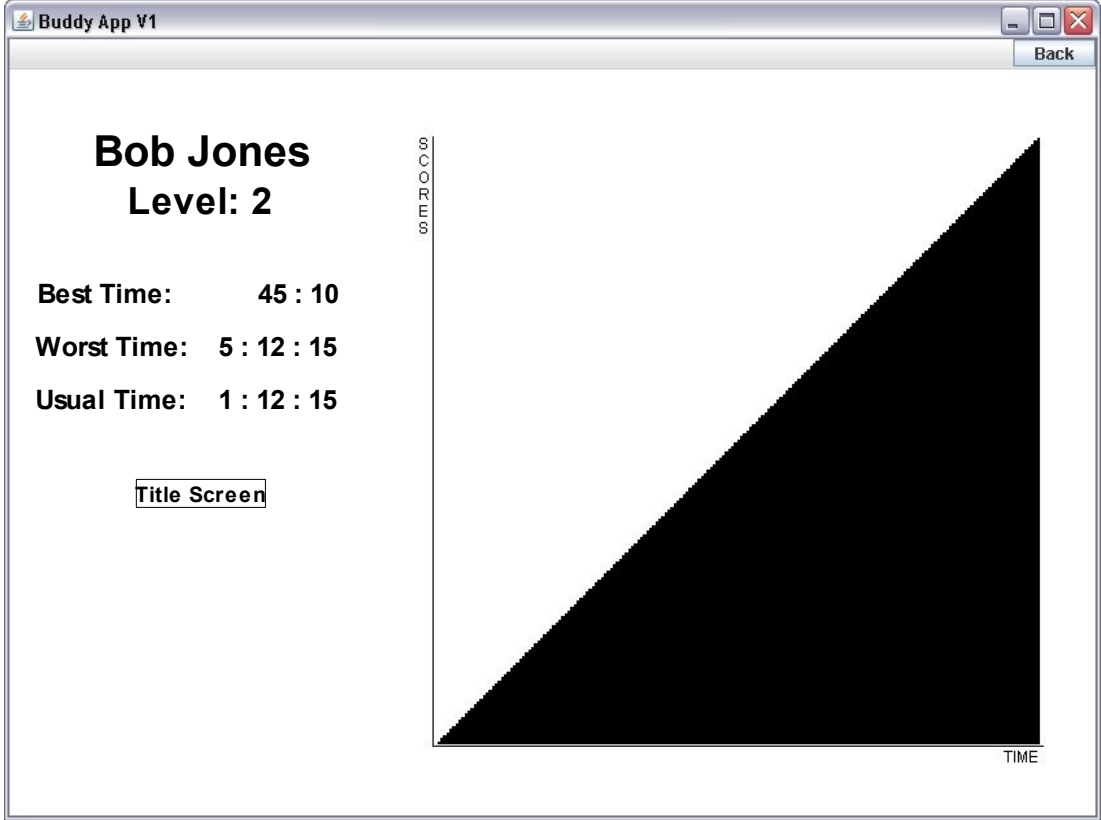
Puzzle Screen



Puzzle Finished Screen



Scores Screen



GUI Behaviour:

1. Title Screen

- Back: Terminate Buddy
- Start Puzzle: Prepares puzzle, and takes the student to the Puzzle Screen
- View Your Scores: Take the user to the scores screen.

2. Puzzle Screen

- The axis for the grid will have as many elements as the length of the largest word + 1. (if the longest word is 5 letters, the grid will be 6x6)
- Time will steadily count up. At 10:00:00 the buddy is failed. Transfer over to the Puzzle Finished Screen, with Buddy Message as “Time's Up!” and do not display the time.
- Click on the two end letters of a word to select the word. If the selected word is in the list, the selected squares turn green and the play button turns into text that says “Found”
- Click on a play button to play the associated word
- When all five words are found, save the time data. Transfer over to the Puzzle Finished Screen, with Buddy Message as “Puzzle Solved!” and show the time.
- Give up returns the user to the title screen

3. Puzzle Finished Screen

- One More Round: Start another puzzle
- Title Screen: Return to the title screen

4. Scores Screen

- Title Screen: Returns to the title screen

Non-code Files:

1. Words and sound associations

- Stored in the buddy's .jar

2. Word sound files

- Stored in the buddy's .jar

3. Scores

- Times stored as millisecond values

4. Additional Buddy Data

- Current level for the person