

Commits Report

Repository: crossword_puzzle

Owner: tomasvana10

Selected authors: All

Start date: N/A | End date: N/A

Branch: main

Newest n commits: None | Oldest n commits: None

Including: No specification

Excluding: No specification

Sorting: Oldest to newest

49ae1c5 | By tomasv (tomasvana@yahoo.com) | At 09/01/2024

Initial commit

[View diff on GitHub](#)

Made layout of program; began on crossword generator

Defined the `Directions` class to specify the value of the "across" and "down" orientations of words in the crossword. The `Style` class specifies what character represents an empty cell. The `Restrictions` class will eventually contain a regex that removes all non-language characters from a string to ensure the crossword contains no symbols, punctuation, whitespace, etc.

Additionally, 4 errors were defined as these will likely need to be handled in the future.

The `Crossword` class is still empty.

[View diff on GitHub](#)

Began developing Crossword class

Added error checking in the constructor and added `_format_definitions` and `_find_dimensions`. The definitions formatter uses a regex added to `Restrictions` in this commit that removes all non-language characters.

Added error class `EscapeCharacterInWord` to provide appropriate error messages to user input that contains '/' as regex cannot remove it.

[View diff on GitHub](#)

687cb2a | By tomasv (tomasvana@yahoo.com) | At 11/01/2024

Added 3 methods in the Crossword class

Added `_initialise_crossword_grid` to to assign self.grid to a two-dimensional array of `Style.EMPTY` characters.

Added `_place_word` to place a word at the given coordinates and orientation.

Added `_find_intersections` to determine how many intersections a word has with other words (at a given position and orientation) in self.grid.

[View diff on GitHub](#)

c31d931 | By tomasv (tomasvana@yahoo.com) | At 11/01/2024

Added 1 method to the Crossword class

Added `_can_word_be_inserted` which uses conditional statements to ensure a word can be place at a given position and orientation in `self.grid`.

[View diff on GitHub](#)

Added 7 methods to the Crossword class

Added the dunder ``str`` method to represent the class as a string when printed

Added ``generate`` which is called on an instance of the class to create and populate ``self.grid``.

Added ``_find_first_word_placement`` to determine the middle indexes of ``self.grid`` for which to place the first word at.

Added ``_find_insertion_coords`` to determine all possible placements for a given word.

Added ``_add_clue`` and ``_add_data`` which append important information for all the words inserted to the crossword (orientation, intersections, position). ``_add_clue`` is friendly for the user to view and is displayed with by printing an instance of the Crossword class.

Added ``_populate_grid`` to find the best placement for a word based on intersections (using ``_find_insertion_coords``). Words with no intersections are reinserted when ``_populate_grid`` is recursed. This function also appends placement information to `self.clues` and `self.data` (using ``_add_clue`` and ``_add_data``).

[View diff on GitHub](#)

Reorganised file structure slightly

[View diff on GitHub](#)

Added intrinsic documentation and finalised the Crossword class

Added extensive intrinsic documentation including docstrings for `Crossword` and its methods.

Added `_prune_placements_for_readability` which eliminates word placements that are directly adjacent to another word. This change drastically improves the overall appearance of the crossword.

A minor change was made in `_populate_grid` to accompany for the new method that was introduced.

[View diff on GitHub](#)

Added 3 static methods to the CrosswordHelper class

The `CrosswordHelper` class features 3 static methods that assist the `Crossword` class and the user

`find_best_crossword` generates a large sum of crosswords depending on the amount of words in the crossword (determined by loading `attempts.json` into a dictionary). This function does not require the user to call `generate()` and instead returns the crossword object directly.

`load_definitions` returns a specified crossword file JSON into a dictionary that is used by `Crossword` to insert words into `self.grid`.

`_load_attempts` returns the `attempts.json` file which relates the amount of words a crossword contains to the appropriate amount of iterations that `find_best_crossword` should run for before returning the best found crossword.

Driver code at the bottom of the script was added to showcase an example usage of `cword_gen.py`.

[View diff on GitHub](#)

Added Paths class

The `Paths` class defines the absolute paths to `attempts_db.json` and the `cwords` directory.

Reworded some parts of the program and added a little intrinsic documentation.

[View diff on GitHub](#)

eae0b8a | By tomasv (tomasvana@yahoo.com) | At 12/01/2024

Added 104 languages to locales and updated main.py

Added the `Home` class that will contain the home screen widgets. Not much functionality is present.

The driver function in `main.py` reads the program's newly added `config.ini` which specifies various different attributes that are handled by the constructor of `Home`.

Also added `locale_utils.py` to parse `googletrans.LANGCODES` to be compatible for use with `pybabel init`.

[View diff on GitHub](#)

4326858 | By tomasv
(124552709+tomasvana10@users.noreply.github.com) | At
12/01/2024

Create LICENSE.md

[View diff on GitHub](#)

Further developed homescreen, added language switching

`Home` now has more features:

- It can access locale information and appropriately set the language from `main.cfg`.
- It contains a language switcher with appropriate messages on switch (no change for visible language yet, only the switching is implemented).
- Appropriate messages on leaving the program

Merged both Chinese language files into one ("zh")

Added `AppHelper` to reduce the clogging of `Home`. 5 static methods were added. `_update_config` updates an option at the specified section with a value, then writes `cfg` to its `config.ini` path.

`_get_language_options` returns all the native language names of the languages in the locales directory (stored in `lang_options`). It also maps each native language name to its english acronym (stored in `lang_db`). This helps the program determine what language the user is picking.

`start_app` initialises the global `cfg` object, reads it, and retrieves the locale based on either prior user preference or data received from the `locale` module. This data is then parsed and assigned to the `locale_` object. The method then instantiates the app with acquired language options and the `locale_` object.

`_confirm_with_messagebox` confirms user choice for different yes/no questions. This will be updated throughout the development process.

`_show_messagebox` is similar to the aforementioned method, but instead only shows errors and info based on the given argument.

[View diff on GitHub](#)

Reorganised homescreen methods and added more global settings

Split the `_make_frames` and `_make_content` so they each have their own function to place themselves.

Added the layout for the `CrosswordBrowser` class which will let the user view all the available crosswords definition sets.

`change_appearance` and `change_scale` have been implemented to allow the user to switch appearance and increase or decrease scale with optionmenus.

Added some additional informational files for each crossword (all the files related to a crossword will now be stored in a folder with the crossword's name). This will help make the crosswords preview block in the crossword browser more informative.

[View diff on GitHub](#)

Localised constants and errors and improved the Crossword Browser

Put all constants from across all the scripts into one file (`constants.py`) from where they can be imported as required. The same was done with the errors, which were put into `errors.py`. When `main.py` requires error detection, the errors will be added to `errors.py` as required.

Made `close_cword_browser` and the process of generating the content on the screen more modular by grouping the making and placing functions (for both frames and other widgets).

Created widgets for `CrosswordBrowser` and a function that instantiates `HorizontalScrollFrame` for n number of times (where n is the amount of available crossword files)

`HorizontalScrollFrame` creates a canvas with a horizontal scrollbar that controls frames within that canvas. Each frame contains an instance of `CrosswordInfoBlock`, which displays the crosswords name, difficulty, and total word count (this data is read from `cword_folder/info.json`)

`cfg` is no longer global, instead, it is passed to `Home` when it is instantiated. Child classes can access it when they inherit from `Home`.

`_determine_true_appearance` is a function that unfortunately had to be made because `ctk.CTkCanvas` cannot switch its foreground colour based on what the user sets with `ctk.set_appearance_mode`.

`_load_cword_info` retrieves the `info.json` file from a given crossword directory.

[View diff on GitHub](#)

Added functionality to launch and view a crossword

The `CrosswordBrowser` class in `main.py` now allows the user to select a crossword (read from `src/cwords/<name>`) and choose a word count preference (either the maximum amount of words for that crossword or a specified amount, starting from 3).

The `load_selected_cword` method in `CrosswordBrowser` gathers the required instance attributes for the selected crossword (chosen word count and name), reads the selected crosswords definitions using `CrosswordHelper.load_definitions`, instantiates the crossword, then the best crossword is found using `CrosswordHelper.find_best_crossword`.

`_configure_optionmenu_state` was implemented to appropriately disable and normalise the state of the custom word count optionmenu so the user cannot select both a maximum word count preference and a custom word count preference.

`on_cword_selection` configures the radiobuttons to display accurate information pertaining to the selected crossword. Whenever a new crossword is selected, `self.selected_cword_name` and `self.selected_cword_word_count` are updated so the program is always ready to instantiate a crossword object when the user is ready.

`CrosswordGame`, which inherits from `CrosswordBrowser`, is a ctk toplevel that fills the users screen and generates an empty version of the generated crossword.

`_make_ref_grid` creates a grid without the word characters, which will be ideal for assigning user input to.

`_make_cells` populates `self.cword_container` with either black or white squares (white being a cell where a character will be).

[View diff on GitHub](#)

Created `definitions_parser.py`, type annotated `crossword_gen.py`

Moved the `_format_definitions` method of `Crossword` into `definitions_parser.py`, which has error detection for any problems in the `definitions` dictionary.

`Crossword` still contains a method that randomises existing definitions when being used in combination with `CrosswordHelper.find_best_crossword`.

`Crossword` now contains a method that creates an unfilled replica of `self.grid` after a crossword is generated.

Added documentation to `locale_utils.py` and converted the functions into static methods.

[View diff on GitHub](#)

Annotated `main.py`, begin developing `cword_webapp`

`main.py` is now completely type annotated and intrinsically documented. The `HorizontalScrollFrame` class was removed and its functionality was replaced with a `ctk.CTkScrollableFrame`.

Added `requirements.txt`.

Began working on the interactive crossword webapp (using Flask and Jinja2) that will allow the user to fill in a generated crossword. Currently, only the html and css for viewing a grid of a variable side length has been written.

[View diff on GitHub](#)

Finished html and css for crossword webapp

The Flask webapp can now run concurrently to the main tkinter application by using the multiprocessing module.

`render_template` contains a large amount of data from the crossword and other classes that will help the templated html and the javascript in accurately visualising the crossword and handling any interactions with it.

The css in `index.html` is at its final stages. It has been expanded to make the program aesthetically pleasing and professional.

Some extra bits of documentation were also added to various modules.

[View diff on GitHub](#)

Developed `script.js`

`script.js` now contains functions that allow the user to interact with the program.

The event listener for `keydown` detects and validates proper user input, then places the entered character in currently focused cell, then shifts the input across or down.

`onDefinitionsListItemClick` allows the user to set their focus to the start of a word by clicking on its definition.

Currently, `checkIfCrosswordsComplete` does not work. Another issue is the `keydown` listener removing all inner html of a cell when modifying its `innerText`, including the number label.

The html in `index.html` and some css within the same file was expanded upon to accompany for the new javascript functionality.

[View diff on GitHub](#)

Simplified script.js and added backspace and click functionality

``checkIfCrosswordIsComplete`` uses the ``every`` method to easily check if a crossword is complete.

The grid now responds to the users click and always ensures that only a single cell can be highlighted a different colour to show input focus (before, the old input focus did not revert its colour).

``onDefinitionsListItemClick`` now sets the user's input focus to the beginning of the word that was clicked.

Regarding ``index.html``, some changes were made to make it more readable and clean.

``babel.cfg`` was made to specify what files to extract translatable strings from when using pybabel.

[View diff on GitHub](#)

Updated colour schemes in the web app

Proper colour schemes were added to the web app based on the `Colours` class in `constants.py` (which received some minor changes in colour hex values). This will ensure that there is consistent colouring in both the customtkinter GUI and the web app. Additionally, a custom background from `https://css-pattern.com` was added.

Removed `Pillow==10.0.0` from `requirements.txt` as this will cause an error with the 10.2.0 version being in the file as well.

[View diff on GitHub](#)

Improved input methods for web app

`script.js` has a few new/modified functions:

`changeWordFocus` fully highlights/un-highlights an entire word row/column whenever the user clicks on a cell or a word definition. This function is called before setting the cell input focus with `changeCellFocus`.

`onCellClick` now allows the user to alternate their input direction when clicking on an intersecting point between two words. To achieve this, `cword_gen.py` gathers the intersection data and `init_webapp` in `main.py` slightly modifies this data to be ready to use in JavaScript. This could have been done in the generator but it would require too much unnecessary modification (it also could've been done solely in JS but would have required extensive conditional statements).

Other functions in `script.js` have been modified to remove both the word and cell focus if the `cellCoords` are not null (meaning the user already has made a selection).

`constants.py` has been modified to include word and cell focus hex colours for both light and dark mode.

All programs use `os.path.join()` instead of using f-strings when defining paths as it is a more reliable and compatible method.

[View diff on GitHub](#)

7c0daf2 | By tomasv (tomasvana@yahoo.com) | At 01/02/2024

Update script.js

Removed unnecessary semicolons, added some semicolons and cleaned up the code. Recommendations were given by `https://jshint.com`.

[View diff on GitHub](#)

Minor bug fix in `script.js`

Prior to this bug fix in `script.js`, the input direction would automatically alternate when clicking at an intersection in the crossword grid. Now, you have to click a second time to alternate the direction.

Also added customtkinter button colours to Constants (and code to retrieve them in `_get_colour_palette_for_webapp` in `main.py`). When buttons are eventually added to the web app.

[View diff on GitHub](#)

35991c4 | By tomasv (tomasvana@yahoo.com) | At 03/02/2024

Moved css to `styles.css`

The css that was original in `index.html` has been linked and is now in its own file in the static directory of the web app. The root variables are still in `index.html` so that the new css file can access them.

Finally figured out how to properly parse a dictionary in JavaScript, so `colour_palette` is now a dictionary (in the html) and `json_colour_palette` is a JSON dumps object that is parsed by the JavaScript. Using a dictionary for the colour palette makes it much more obvious what colours the web app is using.

[View diff on GitHub](#)

448b94a | By tomasv (tomasvana@yahoo.com) | At 03/02/2024

Reworked `cwords` directory structure

Instead of having the data of a crossword named as "<name>.json", it is now simply called `definitions.json`.

[View diff on GitHub](#)

1f254c2 | By tomasv (tomasvana@yahoo.com) | At 03/02/2024

Removed trailing whitespace from test_cword directory

[View diff on GitHub](#)

Added escape, space and arrow key functionality to the web app

The ``keydown`` event listener can now handle spacebar presses, as well as the escape key being pressed by removing the word and cell focus and reassigning ``cellCoords`` to ``null``. Pressing the spacebar assigns a string with a single whitespace in it, which is accompanied for in the ``isEmpty`` function. It could be set to an empty string but this caused some problems when deleting.

``handleArrowPress`` is a new function that allows the user to navigate the grid and switch directions using the arrow keys. It disregards any input that would shift the focus into a ``.empty_cell`` element.

``constants.py`` now uses ``os.path.join`` for its ``Paths`` class instead of using hardcoded paths.

Renamed ``data.json`` to ``definitions.json`` for the capitals crossword as I forgot to do this earlier.

[View diff on GitHub](#)

Improved arrow key functionality for web app

The web app can now fully handle arrow key presses. The arrow keys are capable of moving in any direction and skipping over void/empty_cell elements until a `non_empty_cell` is found.

Pressing the spacebar now alternates the direction if you are at an intersection.

Converted all the short functions into arrow functions.

[View diff on GitHub](#)

Added current word highlighting to `script.js`

The script now has the ability to highlight the definitions list item (or clue) corresponding to what word you are currently focused on. Some functions had to be added to achieve this, such as `updateCurrentWord` which retrieves the word the user is focused on. This word is used in the query selector for the `data-word` attribute (that is now provided in the HTML) in the `getDefinitionsListItemFromWord` function to find the correct clue to highlight.

Moved `handleSpacebarPress` and `handleEscapePress` into their own functions.

`handleArrowPress` was changed to only alternate the direction when pressing the opposite direction at an intersection instead of alternating and immediately shifting the cell, to keep the behaviour consistent with click interactions.

Some additional rules were added to `styles.css` to make the `.definitions` div evenly spaced and padded.

[View diff on GitHub](#)

2445083 | By tomasv (tomasvana@yahoo.com) | At 16/02/2024

Added completion popup and tab support to the web app

An animated popup box will now slide into the centre the screen when completing a crossword. Some inline JS that toggles the the `active` classes of the popup elements was coded in `index.html`.

A bunch of CSS was added to achieve a stylish and clean popup design.

Additionally, tab support was added to the program. Using tab allows the user control what definitions/clue element they are focused on. Pressing enter while they are focused on it will emulate the function of a mouse, hence allowing the user to select words without needing a pointer. The popup close button is also immediately focused after the popup transitions into the page, allowing for fast keyboard user interaction.

Did some small additional type annotations to `main.py`.

Made some parts of `cword_gen.py` shorter. It is still a mess though.

[View diff on GitHub](#)

603bf0f | By tomasv (tomasvana@yahoo.com) | At 16/02/2024

Renamed `script.js` to `interaction.js`

It fits the purpose of the script better.

[View diff on GitHub](#)

Added translations catalogue

`translation_utils.py` was created to translate all untranslated `msgstr` entries in all the `locales` directory. The `google.cloud` module `translate_v2` was used to quickly and efficient create these translations.

Some changes were made to `app.py` to properly integrate it with the rest of the app using `flask-babel`.

All strings that are displayed to the user in `index.html` are now marked as gettext translation strings.

[View diff on GitHub](#)

Reworked parts of the GUI's design

The bottom part of the Crossword Browser containing word count preferences and the load/open/terminate buttons for the webapp were placed without containers and didn't look nice. To fix this, two containers that manage widgets with grid instead of place were added.

Instead of using default font specifications from `constants.py` with the `Fonts` class, all `CTkFont` classes are now instantiated in the `Home` class. Instead of some widgets having custom fonts, all of them have the custom font (font) parameter now, ensuring consistency across the GUI design.

Removed the emoji from the "Languages" label, and updated the locale catalogues accordingly.

[View diff on GitHub](#)

94e6eaf | By tomasv (tomasvana@yahoo.com) | At 19/02/2024

Remove HTML entities from message catalogues

The `translate_v2` module translated apostrophes to a HTML entity. To fix this, all occurrences of the HTML entities were replaced with an apostrophe, the catalogues were recompiled, and, to prevent this error in the future, `translate_v2.Client().translate()` is run with the `format_` parameter set to "text".

[View diff on GitHub](#)

1c3641f | By tomasv (tomasvana@yahoo.com) | At 19/02/2024

Update README.md

[View diff on GitHub](#)

1c672db | By tomasv (tomasvana@yahoo.com) | At 19/02/2024

Minor changes to whitespace in src

[View diff on GitHub](#)

15a673e | By tomasv (tomasvana@yahoo.com) | At 19/02/2024

Added `flask-babel` to `requirements.txt`

[View diff on GitHub](#)

Translated crosswords

Updated the structure of crosswords within the program:

- A crossword's true name is now stored in info.json. The directory name merely serves as a pointer for methods to access it.
- All non-translated crosswords are now stored in `base_cwords`

`translation_utils.py` was modified to update and translate all non-translated crosswords based on the crosswords in the `base_cwords` directory. It first ensure the current locale being accesses has the `cwords` directory, then, compares the crosswords in `cwords` to those in `base_crosswords`, and updates the directories accordingly. Then, the translations are made and written for all untranslated crosswords.

The methods for which `cword_gen.py` and `main.py` access and load crossword data have been modified to properly integrate with this new system. Both `cword_gen.CrosswordHelper.load_definitions` and `main.AppHelper._load_cword_info` contain fallback values when accessing a particular locale's crosswords to prevent errors.

Added a new custom type to `custom_types.py` (`CrosswordData`, inheriting from `TypedDict` to annotate the data structure of a crossword (`definitions.json` and `info.json`))

Made some slight updates to README.md

[View diff on GitHub](#)

Update README.md

[View diff on GitHub](#)

4ecbe4b | By tomasv (tomasvana@yahoo.com) | At 22/02/2024

Created new crosswords

New crosswords (which have also been translated) are all part of the "geography" category (renamed from "capitals". The message catalogues were updated to contain a translation for "geography".

[View diff on GitHub](#)

Update `base_crosswords` and some other modules

Forgot to push the `base_crosswords` directory which is required for the program to operate.

Some minor changes were made across the modules:

- Renamed some classes and attributes, as well as updated the variable names for the crossword images to better fit their shortened name
- Added some extra font classes to `main.py`

A major change was made to the display of crosswords in the crossword browser. Each category is now its own block (instantiated from the new `CrosswordCategoryBlock` class) that manages its parent blocks (the crosswords). Therefore, some of the functionality from `CrosswordBrowser` has been transferred down to `CrosswordCategoryBlock`.

[View diff on GitHub](#)

Remove 2 right-to-left scripts

The translation capabilities for Uyghur and Yiddish were removed (forgot to do this earlier)

[View diff on GitHub](#)

509cd3c | By tomasv (tomasvana@yahoo.com) | At 23/02/2024

Made small updates to source code

Updated some parts of the source code with the main objectives of improving naming and whitespace consistency, improving conciseness and improving readability.

[View diff on GitHub](#)

e2b1cda | By tomasv (tomasvana@yahoo.com) | At 23/02/2024

Minor bug fix

Some syntax errors relating to f-strings only present in some operating systems (no clue why) were fixed. Also noticed that `flask-babel` may fail to be imported when running the program with `python3` (no clue why). Additional info in the README was added to address this occurrence.

[View diff on GitHub](#)

66ee9ac | By tomasv (tomasvana@yahoo.com) | At 24/02/2024

Update README.md

[View diff on GitHub](#)

dff75a9 | By tomasv (tomasvana@yahoo.com) | At 26/02/2024

Added reveal, check and clear buttons to the web app

The web app now has 3 buttons (Reveal, Check and Clear) that open dropdowns, allowing the user to reveal/check the current cell, word or the grid, as well as clear the current word or the grid. ``interaction.js`` has been modified to properly serve this functionality to the user with two new functions (``handleCheckOrRevealButtonPress`` and ``handleClearButtonPress``).

An on-load popup was added to the web app to display the crossword name, category, word count and any failed insertions (with the adjusted word count).

The ``getWordIndices`` function in ``interaction.js`` is now a generator function.

[View diff on GitHub](#)

e9223e2 | By tomasv (tomasvana@yahoo.com) | At 26/02/2024

Updated translations catalogue

Made to accompany for the new changes made in the previous commit.

[View diff on GitHub](#)

f35084a | By tomasv (tomasvana@yahoo.com) | At 26/02/2024

Replaced "countries" with "geography" in all ``info.json`` files

Frogor to do this earlier

[View diff on GitHub](#)

7983d8a | By tomasv (tomasvana@yahoo.com) | At 28/02/2024

Update README.md

Added Flask to acknowledgements and made a brief change in the installation steps.

[View diff on GitHub](#)

1676166 | By tomasv (tomasvana@yahoo.com) | At 28/02/2024

Added "science" and "math" crosswords

Also made some very minor changes to existing crosswords and translation catalogues.

[View diff on GitHub](#)

7585403 | By tomasv (tomasvana@yahoo.com) | At 28/02/2024

Added keybinds to web app

`interaction.js` now has support for a few keybinds. Using combinations of "Shift" and "Enter", "Clear", or just "Enter" allows the user to reveal, check or clear a word respectively.

Broke down the function that reveals the cell/word/grid and isolated each main operation in its own function.

Slightly modified `styles.css`, mainly for the purpose of replacing fixed units with relative units.

The inline JavaScript in `index.html` now allows dropdowns to close if the user clicks anywhere but the dropdown. The HTML structure was also properly indented.

[View diff on GitHub](#)

0d12cc1 | By tomasv (tomasvana@yahoo.com) | At 28/02/2024

Added fallbacks to the crossword loading system

The definitions loader in `cword_gen.py` and the info loader in `main.py` will now access the base crossword data if they cannot find data for the translated crossword that was requested.

[View diff on GitHub](#)

62b2f63 | By tomasv (tomasvana@yahoo.com) | At 06/03/2024

Updated translation catalogue

Two minor changes.

[View diff on GitHub](#)

ae9d77a | By tomasv (tomasvana@yahoo.com) | At 06/03/2024

Minor updates to `cword_gen.py` and `main.py`

Just changed a very little amount of documentation and indentation.

Additionally, the `js_err_msgs` param now only contains one error message.

[View diff on GitHub](#)

New web app features and bug fixes

Some bug fixes were made:

- The ``keydown`` listener now properly handles the use of the ``Enter`` keybind, instead of clicking a definitions list item (if you just selected one).
- You can no longer use keybinds while a popup is open.
- Dropdowns now properly close when focusing out of them.
- An extension to the prior fix: Dropdowns no longer immediately close and reopen if you manually click on a dropdown button that you tabbed to.

Added cell skipping functionality to ``interaction.js`` through the ``skipCellCoords`` function, which attempts to skip over already filled cells until an unfilled one is found. This functionality can be toggled via the ``toggle_checkbox`` checkbox.

Added functionality to save and store cookies to remember the state of the checkbox.

Massively simplified the reveal, check and clear functions. They are now all handled by ``doSpecialButonAction``. All reveal/check/clear actions are handled by ``doGridOperation``, instead of the prior methods, which essentially repeated the same code for each operation.

Added some new styles to ``styles.css`` to accompany for the new checkbox. The majority of these styles are from ``https://codepen.io/morgoe/pen/VvzWQg``.

[View diff on GitHub](#)

Update README.md

Minor badge change.

[View diff on GitHub](#)

2fc5bee | By tomasv (tomasvana@yahoo.com) | At 07/03/2024

Minor update to source code

Removed unused import in `constants.py`

Greatly shortened the render_template parameters in `app.py` by utilising the `**dict` (function) syntax.

Added `cursor: pointer` to the `.toggle` selector in `styles.css` to ensure the user knows that the smart skip toggle is clickable.

[View diff on GitHub](#)

f0c7a71 | By tomasv (tomasvana@yahoo.com) | At 07/03/2024

Update README.md

Added hyperlink to release badge

[View diff on GitHub](#)

b671b64 | By tomasv (tomasvana@yahoo.com) | At 08/03/2024

Update README.md

Fixed hyperlink for release badge

[View diff on GitHub](#)

9820b28 | By tomasv (tomasvana@yahoo.com) | At 10/03/2024

Updated translations catalogue + bug fix

Added 1 new translation required for the commit that will be made after this one.

Additionally, a minor bug fix was made:

- Some `info.json` files had a "total_definitions" entry that was inaccurate to the corresponding `definitions.json` file. This occurred because the `definitions.json` was missing a single entry (no idea why). A short script was executed to remove any inconsistencies, as this caused errors with `definitions_parser.py` when loading a crossword with the maximum word count (in some crosswords in languages other than English).

[View diff on GitHub](#)

23f6ca3 | By tomasv (tomasvana@yahoo.com) | At 10/03/2024

Added logo to GUI

Designed a logo for crossword_puzzle in photoshop. It is viewed in the title bar of the GUI through tkinter's `iconbitmap` method. And of course, it doesn't work on MacOS.

[View diff on GitHub](#)

Added zooming functionality to the web app

zoomooz.js, a very useful jQuery plugin (check it out here: <https://jaukia.github.io/zoomooz/>) was used to implement zooming functionality in the web app.

The HTML structure of the program had to be modified to include `zoomViewport` and `zoomContainer` divs, as well as to include the script of zoomooz and jQuery.

A new checkbox was added to toggle the zoom.

To properly prevent zooming, a stupidly long amount of time was wasted trying multiple different implementations of this feature. Eventually, the `onCellClick` and `onDefinitionsListItemClick` were removed from the HTML command attribute, and instead were implemented via event listeners. This allowed for the use of the `event.stopPropagation` method, which prevents the jQuery listener from zooming if the click to zoom checkbox is disabled.

A bunch of new CSS and JS (to modify the crap CSS) was added to integrate the zooming feature as well as possible. Many issues were encountered, mainly overflow content due to the mess of new containers in the HTML.

To complement the new zooming feature, `styles.css` was modified to allow font scaling relative to that of the GUI. For example, if you have a font scaling of 1.5 on the GUI, then all paragraphs in the web app, for example, will have 1.5x larger text.

The original inline JS in `index.html` was moved to `utils.js`. The only inline JS that will be written in `index.html` from now on will be related to scrolling, as it often requires jQuery, and I don't know how to make it work in its own JS file.

Finally, a favicon was also added (it is identical to the logo).

[View diff on GitHub](#)

284d49e | By tomasv (tomasvana@yahoo.com) | At 10/03/2024

Update README.md

Included acknowledgement of Zoomooz.js

[View diff on GitHub](#)

f5ce6d3 | By tomasv (tomasvana@yahoo.com) | At 10/03/2024

Update README.md

Made acknowledgements for CSS Pattern and Pure CSS Toggle Switch. Also made a minor change in the indentation in `styles.css`.

[View diff on GitHub](#)

65601c8 | By tomasv (tomasvana@yahoo.com) | At 10/03/2024

Update styles.css

Increase z-index for `.definitions`

[View diff on GitHub](#)

3af73c1 | By tomasv (tomasvana@yahoo.com) | At 10/03/2024

Update README.md

Added gallery with 4 images

[View diff on GitHub](#)

837689c | By tomasv (tomasvana@yahoo.com) | At 10/03/2024

Minor update + bug fix for web app

Updated the conditionals to ensure that elements with the class "def" were properly handled.

Also added tabindex functionality for the checkboxes.

[View diff on GitHub](#)

d3f3e8c | By tomasv (tomasvana@yahoo.com) | At 14/03/2024

Added computer science crosswords

[View diff on GitHub](#)

3cd48a9 | By tomasv (tomasvana@yahoo.com) | At 16/03/2024

Update README.md

[View diff on GitHub](#)

ed1102f | By tomasv (tomasvana@yahoo.com) | At 16/03/2024

Refactored source code

Created more explicit imports in , and to reduce namespace pollution. Updated indentation accordingly.

[View diff on GitHub](#)

9eaca6e | By tomasv (tomasvana@yahoo.com) | At 17/03/2024

Update `README.md` and `requirements.txt`

Changed the version of the `regex` module in `requirements.txt` to 2023.12.25 (from 2023.6.3), as installing this requirement through `pip install` would cause a build error on Windows in some cases. Modified `README.md` to account for this change.

[View diff on GitHub](#)

b5dc180 | By tomasv (tomasvana@yahoo.com) | At 18/03/2024

Modified colours in GUI and web app

Changed the button to open the crossword in main.py to turn green when a crossword is loaded, to ensure the user understands that they can proceed. Additionally, the keybind spans in the web app have the same green colour.

[View diff on GitHub](#)

a4f3d0a | By tomasv (tomasvana@yahoo.com) | At 19/03/2024

Added more error handling to GUI

Added try/except blocks to both the definitions loading and crossword generation processes. The program only reconfigures the states of the widgets after all error checking is passed. Additionally, `app.py` was updated to automatically find available ports using the socket module (if the port specified in `config.ini` is already in use). The `show_messagebox` method now accompanies for these new errors as well.

All crossword errors in `errors.py` now inherit from the `CrosswordBaseError` class.

Translation catalogue was updated to accompany for the new error messages.

[View diff on GitHub](#)

90cfdaa | By tomasvana10 (tomasvana@yahoo.com) | At
21/03/2024

Minor bug fix to `app.py`

Fixed f-string issue in print statement that was not picked up on MacOS for some reason.

[View diff on GitHub](#)

2d29619 | By tomas (tomas@ubuntu.myguest.virtualbox.org) | At
24/03/2024

Fixed type checking error

The use of an ellipsis in type annotation was not allowed when testing this program on linux. It has been replaced with NoneType.

[View diff on GitHub](#)

02818cb | By tomasvana10 (tomasvana@yahoo.com) | At
25/03/2024

Improved light mode colours for web app

The 'correct' colour, seen when you reveal/check a cell (when viewing the crossword in light mode) was too hard to differentiate from the blue selection colour of the current word. It was darkened to improve the ergonomics of the web app's design.

[View diff on GitHub](#)

5dfda4c | By tomasvana10 (tomasvana@yahoo.com) | At
25/03/2024

Replaced zoomooz.js with its minimised version

Using the minimised version of the zooming script will improve the performance of the web app.

[View diff on GitHub](#)

6b260eb | By tomasv (tomasvana@yahoo.com) | At 02/04/2024

Update web app

Added the `updateDefinitionsListPos` function which triggers whenever a new word is selected. It ensures the definitions list is at the correct position so that the user can see their current word's definition. Also added a fallback value of 1 to `max_attempts` if the word count of the current crossword is not in `attempts_db`.

[View diff on GitHub](#)

7cac1b3 | By tomasv (tomasvana@yahoo.com) | At 08/04/2024

Convert codebase to package

[View diff on GitHub](#)

26edf14 | By tomasv (tomasvana@yahoo.com) | At 08/04/2024

Update README.md

[View diff on GitHub](#)

399b073 | By tomasv (tomasvana@yahoo.com) | At 08/04/2024

Update README.md

[View diff on GitHub](#)

7365078 | By tomasv (tomasvana@yahoo.com) | At 08/04/2024

Change line wrapping for python files

Modified the wrapping of all the python files to follow PEP8's recommendation of 79 columns. Also added some more documentation to cword_gen.py, and added leading underscores to the localisation-related modules to signify their internal use, as the end-user never accesses them.

[View diff on GitHub](#)

9ca7d16 | By tomasv (tomasvana@yahoo.com) | At 08/04/2024

Fix unterminated f-string

[View diff on GitHub](#)

44cdef5 | By tomasv (tomasvana@yahoo.com) | At 10/04/2024

Update README.md

[View diff on GitHub](#)

9073a4f | By tomasvana10 (tomasvana@yahoo.com) | At
21/04/2024

Removed relative imports from codebase

[View diff on GitHub](#)

7b112ca | By tomasvana10 (tomasvana@yahoo.com) | At
21/04/2024

Fixed Issue #2 in crossword generator

The crossword generation algorithm can now recognise directly adjacent intersections, thus fixing Issue #2. Some methods were renamed for clarity as well.

[View diff on GitHub](#)

c939917 | By tomasvana10 (tomasvana@yahoo.com) | At
21/04/2024

Optimise setup building parameters

Removed all .po files from the final wheel/tar file that is built with setuptools, as only the compiled (.mo) files are used when installing translations with gettext. MANIFEST.in was also modified to achieve this.

[View diff on GitHub](#)

1002234 | By tomasvana10 (tomasvana@yahoo.com) | At
22/04/2024

Remove debugging code from cword_gen

[View diff on GitHub](#)

70f418a | By tomasvana10 (tomasvana@yahoo.com) | At
25/04/2024

Fix import error when using entry point

[View diff on GitHub](#)

c68f262 | By tomasv
(124552709+tomasvana10@users.noreply.github.com) | At
25/04/2024

Create publish.yml

[View diff on GitHub](#)

7952c2d | By tomasv
(124552709+tomasvana10@users.noreply.github.com) | At
25/04/2024

Create CONTRIBUTING.md

[View diff on GitHub](#)

7a5d1c6 | By tomasvana10 (tomasvana@yahoo.com) | At
25/04/2024

Update publish.yml

[View diff on GitHub](#)

822d2c4 | By tomasvana10 (tomasvana@yahoo.com) | At
25/04/2024

Bump version

[View diff on GitHub](#)

60a5c1e | By tomasv
(124552709+tomasvana10@users.noreply.github.com) | At
25/04/2024

Update README.md

Added publish badge for the PyPI package

[View diff on GitHub](#)

620554f | By tomasvana10 (tomasvana@yahoo.com) | At
28/04/2024

Switch to builtin type annotations

[View diff on GitHub](#)

5046315 | By tomasvana10 (tomasvana@yahoo.com) | At
28/04/2024

Merge most helper functions into utils.py

Added all of the CrosswordHelper functions into utils.py, as these functions are also used by main.py, so it makes sense for them to be in a central file. Almost all of the AppHelper functions were also added to this file, except for those that are related to i18n and are solely used within the main module.

[View diff on GitHub](#)

f90af67 | By tomasvana10 (tomasvana@yahoo.com) | At
28/04/2024

Refactor: format whole codebase

Used the black formatter to format all python files. Additionally, some improvements were made to the code with the aims of improving conciseness and readability. The Prettier formatter was used to format all of the JavaScript, HTML and CSS code. Some extra documentation was added to interaction.js as well.

[View diff on GitHub](#)

3d708a1 | By tomasv
(124552709+tomasvana10@users.noreply.github.com) | At
28/04/2024

Bump version

[View diff on GitHub](#)

f820eef | By tomasvana10 (tomasvana@yahoo.com) | At
28/04/2024

Fix import error in utils.py

[View diff on GitHub](#)

c791a5a | By tomasvana10 (tomasvana@yahoo.com) | At
28/04/2024

Add commits pdf to docs

[View diff on GitHub](#)

2ed8c50 | By tomasvana10 (tomasvana@yahoo.com) | At
28/04/2024

Improve crossword/crossword category viewing logic

Reduced the possibility of errors when viewing/loading crossword categories and crosswords. Additionally, some methods were added to utils.py to help the program infer the contents of an info.json file for a crossword directory with an empty info.json file, as well as randomly generate an info.json file for bare crossword category directories. This will allow the user more easily to create their own crosswords (if they really want to).

[View diff on GitHub](#)

63c4fa8 | By tomasv
(124552709+tomasvana10@users.noreply.github.com) | At
28/04/2024

Bump version

[View diff on GitHub](#)

f425165 | By tomasvana10 (tomasvana@yahoo.com) | At
29/04/2024

chore: Add tox-tests.yml, update README.md

[View diff on GitHub](#)

5a1548e | By tomasvana10 (tomasvana@yahoo.com) | At
29/04/2024

Bump version, update tox-tests.yml

[View diff on GitHub](#)

047fe98 | By tomasv
(124552709+tomasvana10@users.noreply.github.com) | At
29/04/2024

Update README.md

[View diff on GitHub](#)

c87f94b | By ai-rafat
(140475841+ai-rafat@users.noreply.github.com) | At 02/05/2024

Update messages.po

Hi! This is Rafat the Korean!
Made your translation way better

[View diff on GitHub](#)

92cb977 | By ai-rafat
(140475841+ai-rafat@users.noreply.github.com) | At 02/05/2024

Update messages.po

Changed

[View diff on GitHub](#)

ac9b693 | By tomasv
(124552709+tomasvana10@users.noreply.github.com) | At
02/05/2024

Merge pull request #4 from ai-rafat/patch-1

Update messages.po - ko (#4)

[View diff on GitHub](#)

11e5af0 | By Tomas Vana (tomasvana@yahoo.com) | At 02/05/2024

Compile new korean translations

[View diff on GitHub](#)

3f507e9 | By tomasv
(124552709+tomasvana10@users.noreply.github.com) | At
02/05/2024

Bump version

[View diff on GitHub](#)
