

Commit Report

Repository: crossword_puzzle

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

Initial commit

https://github.com/tomasvana10/crossword_puzzle/commit/49ae1c5d0fac28832d165f2db2e5eedf7d802914

c33c51a | By tomasv (tomasvana@yahoo.com) | At 11/01/2024

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.

https://github.com/tomasvana10/crossword_puzzle/commit/c33c51aacc75bc15cd5652d34942038d8071244f

10a2378 | By tomasv (tomasvana@yahoo.com) | At 11/01/2024

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.

https://github.com/tomasvana10/crossword_puzzle/commit/10a2378d4522ca68c617279a1f61101317dba6f3

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.

https://github.com/tomasvana10/crossword_puzzle/commit/687cb2aa063c20e636e57b7f972913806bbe7afd

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`.

https://github.com/tomasvana10/crossword_puzzle/commit/c31d93179677f98ec9a5cc2ca3edc09f9174040d

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``).

https://github.com/tomasvana10/crossword_puzzle/commit/87d57f90206fcf02c670747b83f13fcc8a2ec84e

Reorganised file structure slightly

https://github.com/tomasvana10/crossword_puzzle/commit/5cdca5d4ba8175d5549ac63c0a1a9910e8f6b0ef

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.

https://github.com/tomasvana10/crossword_puzzle/commit/021130e3938481031278770e468ad9b387830ae5

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`.

https://github.com/tomasvana10/crossword_puzzle/commit/dff2bfdcf381e97a23eebaa8b2ac1cc88d1902f4

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.

https://github.com/tomasvana10/crossword_puzzle/commit/1aa7005430448bdb69e80952bb49fdcd9d039aca

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`.

https://github.com/tomasvana10/crossword_puzzle/commit/eae0b8aebe2b630c2d4c5e4c6bf1fcf5856ab3c

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

Create LICENSE.md

https://github.com/tomasvana10/crossword_puzzle/commit/432685816d4efaf57bc8bdbda6535ec7f3f11daf

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 updates throught the development process.

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

https://github.com/tomasvana10/crossword_puzzle/commit/e04054c7ba0896f93e0b05d94b159d3eaa37676c

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.

https://github.com/tomasvana10/crossword_puzzle/commit/2a7c5a1cf3a7970db1b55bc39290010a738d5031

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.

https://github.com/tomasvana10/crossword_puzzle/commit/2a27162765c49f80a8b9c7be6fa940ee87d6591a

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).

https://github.com/tomasvana10/crossword_puzzle/commit/53a2d672a2ba33bd548f2a5103dda465feee58cf

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

https://github.com/tomasvana10/crossword_puzzle/commit/a1f0853c281c022ebc3c864d21f3dfe43ecd3351

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.

https://github.com/tomasvana10/crossword_puzzle/commit/ef4288fea293a4b0a0e15d5ed7274e5a6b9a53f4

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.

https://github.com/tomasvana10/crossword_puzzle/commit/45c510b317b857daa67c9b187ecc6731555d2ad6

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, `checkIfCrosswordIsComplete` 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.

https://github.com/tomasvana10/crossword_puzzle/commit/ca448ddde88799bc7d9f5d8bb79cf3d1c54c6651

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.

https://github.com/tomasvana10/crossword_puzzle/commit/ff158cbd3da8fa120b55648e90113f4a5278c7f8

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.

https://github.com/tomasvana10/crossword_puzzle/commit/a3385147d133558bba3a5158a5034a9e738dce9c

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.

https://github.com/tomasvana10/crossword_puzzle/commit/883a64bff1c3ae4b23426f6cb8751e7cffb4eff4

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`.

https://github.com/tomasvana10/crossword_puzzle/commit/7c0daf2bb570ce450dc9f5a9cd6b3caeac01c791

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.

https://github.com/tomasvana10/crossword_puzzle/commit/2cd8e35fc25631bcfe88ed605138d722b5575e57

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.

https://github.com/tomasvana10/crossword_puzzle/commit/35991c4d2d574b5eacb910b7861eca584373bd9c

Reworked `cwords` directory structure

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

https://github.com/tomasvana10/crossword_puzzle/commit/448b94a5847ad14acbd9bfe0d7271804183deced

Removed trailing whitespace from test_cword directory

https://github.com/tomasvana10/crossword_puzzle/commit/1f254c2799eeb8e3f60367248e9cd15862e28324

ac8bad2 | By tomasv (tomasvana@yahoo.com) | At 05/02/2024

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.

https://github.com/tomasvana10/crossword_puzzle/commit/ac8bad2d35985877c456cfb71ea20384200ac2c3

59814dd | By tomasv (tomasvana@yahoo.com) | At 12/02/2024

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.

https://github.com/tomasvana10/crossword_puzzle/commit/59814dd031596fe9c71a5eea2c45ff8b8c57828d

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.

https://github.com/tomasvana10/crossword_puzzle/commit/ba97c34b70a6cc218afbaf032c0453a89c187b0f

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.

https://github.com/tomasvana10/crossword_puzzle/commit/2445083b3cf269f86316401e1c2cf101b41e087c

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

It fits the purpose of the script better.

https://github.com/tomasvana10/crossword_puzzle/commit/603bf0fd6d59671f62085ccfefe8dd83f144eb21

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.

https://github.com/tomasvana10/crossword_puzzle/commit/f491adf564bf669de72fadba50d1ce831b135167

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.

https://github.com/tomasvana10/crossword_puzzle/commit/5da7a7c09489a8f17a511a57e60417ba3743da15

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"`.

https://github.com/tomasvana10/crossword_puzzle/commit/94e6eafd098959cf98c116fb032d0dee179eca6b

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

Update README.md

https://github.com/tomasvana10/crossword_puzzle/commit/1c3641f9efadd1f22c0f46d10c05826b7d334644

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

Minor changes to whitespace in src

https://github.com/tomasvana10/crossword_puzzle/commit/1c672db9b833c12010c5aaa1a2f7ec76b0875ea6

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

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

https://github.com/tomasvana10/crossword_puzzle/commit/15a673ea205e8bc36486c0b68253f1c7ced169b2

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

https://github.com/tomasvana10/crossword_puzzle/commit/05d4bdb2a7988b7ff93f53954f601c4fe2556def

Update README.md

https://github.com/tomasvana10/crossword_puzzle/commit/177a6cb36ae0e13ae6b95111a1e68a774ae8973b

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".

https://github.com/tomasvana10/crossword_puzzle/commit/4ecbe4b55d013d5504ea11c38bf61616ee706fd8

c5ad17f | By tomasv (tomasvana@yahoo.com) | At 22/02/2024

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 it's 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`.

https://github.com/tomasvana10/crossword_puzzle/commit/c5ad17f1de14fd1b8df4a5e2d3efaf9fec7c65a7

e256961 | By tomasv (tomasvana@yahoo.com) | At 23/02/2024

Remove 2 right-to-left scripts

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

https://github.com/tomasvana10/crossword_puzzle/commit/e256961b196e4696ec961068e31f0e3a6db9334b

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.

https://github.com/tomasvana10/crossword_puzzle/commit/509cd3c0d15f648375ff8e94ddad6dceec640ac47

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.

https://github.com/tomasvana10/crossword_puzzle/commit/e2b1cda92dd241e4c491b29a697f0174ce5a8c89

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

Update README.md

https://github.com/tomasvana10/crossword_puzzle/commit/66ee9ac0b613a6e2bf43d8b2c67605d8c7839667

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.

https://github.com/tomasvana10/crossword_puzzle/commit/dff75a9501fbec40ae0feb78b8c0b159aee29b5d

Updated translations catalogue

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

https://github.com/tomasvana10/crossword_puzzle/commit/e9223e2127d82ab91149b6ad62d9786c9677ed56

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

Frogor to do this earlier

https://github.com/tomasvana10/crossword_puzzle/commit/f35084afad00f881ffa759faea23cae934025210

Update README.md

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

https://github.com/tomasvana10/crossword_puzzle/commit/7983d8a37bde8ee55bb8ac527b5c1f8dce6c6b45

Added "science" and "math" crosswords

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

https://github.com/tomasvana10/crossword_puzzle/commit/1676166899f5ab1396bc4acea39f20f1c086c562

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.

https://github.com/tomasvana10/crossword_puzzle/commit/7585403a6a98249755f14b1a2d0910b11c5101c3

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.

https://github.com/tomasvana10/crossword_puzzle/commit/0d12cc1b79dbfb6bfd619ddbc34d9cfa573c7242

Updated translation catalogue

Two minor changes.

https://github.com/tomasvana10/crossword_puzzle/commit/62b2f63248848a221cd58e3c84994edbec86543d

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.

https://github.com/tomasvana10/crossword_puzzle/commit/ae9d77a4977b8b1296f7d84e2ed906848da0abe5

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``.

https://github.com/tomasvana10/crossword_puzzle/commit/1ae4d58623a902709ac944b4f5f321f267774106

Update README.md

Minor badge change.

https://github.com/tomasvana10/crossword_puzzle/commit/ba0a93d0df8e727dae9775b2be7437d939e55f3f

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.

https://github.com/tomasvana10/crossword_puzzle/commit/2fc5bee946cdfb3a59e572b7c7eb13e39e7fca99

Update README.md

Added hyperlink to release badge

https://github.com/tomasvana10/crossword_puzzle/commit/f0c7a71929b4ffbf4a43b5a923c412f64d05d01d

Update README.md

Fixed hyperlink for release badge

https://github.com/tomasvana10/crossword_puzzle/commit/b671b64bd09dcea2edf0b7242f7256d4ab7184a9

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).

https://github.com/tomasvana10/crossword_puzzle/commit/9820b28d3e3b434a926e601e1ebfe2af475b49a3

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.

https://github.com/tomasvana10/crossword_puzzle/commit/23f6ca3096df41ce9ede49d12453994c03906931

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).

https://github.com/tomasvana10/crossword_puzzle/commit/e35abd622bf8ad8e810cdb2fa78606b8dd15e946

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

Update README.md

Included acknowledgement of Zoomooz.js

https://github.com/tomasvana10/crossword_puzzle/commit/284d49ed1558545378dc31367c015fc87ad30e27

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`.

https://github.com/tomasvana10/crossword_puzzle/commit/f5ce6d3157ff45940064574410c6abf59eaf1f0a

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

Update styles.css

Increase z-index for `.definitions`

https://github.com/tomasvana10/crossword_puzzle/commit/65601c87e88763348061957aa00773c001196cac

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

Update README.md

Added gallery with 4 images

https://github.com/tomasvana10/crossword_puzzle/commit/3af73c1166539ec5fdbe55c8ba5259f35055fe8a

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.

https://github.com/tomasvana10/crossword_puzzle/commit/837689c26a3f7976a5cd401d859ea283869bb81d

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

Added computer science crosswords

https://github.com/tomasvana10/crossword_puzzle/commit/d3f3e8c918a7b66c716728684e2ceea28ee05ef0

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

Update README.md

https://github.com/tomasvana10/crossword_puzzle/commit/3cd48a965191ad98addbc37cf6ff09b2f59c7646

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.

https://github.com/tomasvana10/crossword_puzzle/commit/ed1102f3f97e02159904ba88b211b08632ac2617

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.

https://github.com/tomasvana10/crossword_puzzle/commit/9eaca6e532a040fca55063613ae753a2779fc5ca

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.

https://github.com/tomasvana10/crossword_puzzle/commit/b5dc180697421cbcff54d1b93864b82a2b2aba7b

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.

https://github.com/tomasvana10/crossword_puzzle/commit/a4f3d0a25812c8ad6daa39e143a9f75bbf9e2824

Minor bug fix to `app.py`

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

https://github.com/tomasvana10/crossword_puzzle/commit/90cfdaa1ab5d33b1d079d06be7e6f6bc7c155356

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.

https://github.com/tomasvana10/crossword_puzzle/commit/2d29619d3cb88d78bc50da22b74f4c70a75f3534

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.

https://github.com/tomasvana10/crossword_puzzle/commit/02818cb6d05edda69a6fd9c46d63c16c4e4dec0e

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.

https://github.com/tomasvana10/crossword_puzzle/commit/5dfda4cd23c51de3bcd52e9149334f276baa209c

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.

https://github.com/tomasvana10/crossword_puzzle/commit/6b260ebfa7afd6fe2cacebe0246b45d90af98551

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

Convert codebase to package

https://github.com/tomasvana10/crossword_puzzle/commit/7cac1b3d5b9c1f79434e3ea84a7d885a6d1afb7e

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

Update README.md

https://github.com/tomasvana10/crossword_puzzle/commit/26edf14bbab35c11e7551a893918f46042fb5ea9

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

Update README.md

https://github.com/tomasvana10/crossword_puzzle/commit/399b0736c4391e00c82a957b78c57d8202df28a3

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.

https://github.com/tomasvana10/crossword_puzzle/commit/736507830b5d9990e6db5de9bc4dd768dcf796fa

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

Fix unterminated f-string

https://github.com/tomasvana10/crossword_puzzle/commit/9ca7d16adcca745ae49eadbf9d8ec9e78da394

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

Update README.md

https://github.com/tomasvana10/crossword_puzzle/commit/44cdef5adce7017ce36d1b2c1b79f7ed1206d061

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

Removed relative imports from codebase

https://github.com/tomasvana10/crossword_puzzle/commit/9073a4f28abe860ca4066a99f3493c5a14c2df71

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.

https://github.com/tomasvana10/crossword_puzzle/commit/7b112ca62a906a507f8032dad1cbf9cf6c6d0a16

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.

https://github.com/tomasvana10/crossword_puzzle/commit/c93991752f517a6c00de8c3291070e6911d3458b

Remove debugging code from cword_gen

https://github.com/tomasvana10/crossword_puzzle/commit/1002234ecdc112f97446434089d27001b221812f

Fix import error when using entry point

https://github.com/tomasvana10/crossword_puzzle/commit/70f418a0256639687f259b60308be4d4038575cb

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

Create publish.yml

https://github.com/tomasvana10/crossword_puzzle/commit/c68f262f3c1b01d3a121a7c432e2e263185e0299

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

Create CONTRIBUTING.md

https://github.com/tomasvana10/crossword_puzzle/commit/7952c2d4221fa7740f47aa3bbab13de573247b9e

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

Update publish.yml

https://github.com/tomasvana10/crossword_puzzle/commit/7a5d1c69747d442eadc0190056e696fb3a14c07e

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

Bump version

https://github.com/tomasvana10/crossword_puzzle/commit/822d2c4f68ffa92180d5df28b7b33c6491789256

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

Update README.md

Added publish badge for the PyPI package

https://github.com/tomasvana10/crossword_puzzle/commit/60a5c1eca43aab92028f74e0bd9f9a1f9b32b669

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

Switch to builtin type annotations

https://github.com/tomasvana10/crossword_puzzle/commit/620554f017e376c06092ca97df874e1caf444334

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.

https://github.com/tomasvana10/crossword_puzzle/commit/50463159b1d6429f9d6a5eb824723e4d30ae35f2

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.

https://github.com/tomasvana10/crossword_puzzle/commit/f90af672488a9af6353d24c72274c8ad90d7597e

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

Bump version

https://github.com/tomasvana10/crossword_puzzle/commit/3d708a1f13aaf85d94e21550686f89c8f596b628

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

Fix import error in utils.py

https://github.com/tomasvana10/crossword_puzzle/commit/f820eef5f07dff2117ce44259a3099f205406c70

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

Add commits pdf to docs

https://github.com/tomasvana10/crossword_puzzle/commit/c791a5a67855ed573fe9cad241b6a65eb84df67

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).

https://github.com/tomasvana10/crossword_puzzle/commit/2ed8c507d7c76780592b7b8b64944f26de84bb4b

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

Bump version

https://github.com/tomasvana10/crossword_puzzle/commit/63c4fa8362567d5d3b426e8be50293b0fe4694f9

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

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

https://github.com/tomasvana10/crossword_puzzle/commit/f4251656968d4e335c81e5ce31e6d2166ff6d8c7

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

Bump version, update tox-tests.yml

https://github.com/tomasvana10/crossword_puzzle/commit/5a1548e69a9d11fead43f11977bc7c9360cc8390

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

Update README.md

https://github.com/tomasvana10/crossword_puzzle/commit/047fe98a0356e760e0eccf71d5224813b2c9bdca

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

https://github.com/tomasvana10/crossword_puzzle/commit/c87f94ba03da067314e0bd6fe891a7f573831359

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

Update messages.po

Changed

https://github.com/tomasvana10/crossword_puzzle/commit/92cb97741159d65d1dab2909a0e9580e417372da

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)

https://github.com/tomasvana10/crossword_puzzle/commit/ac9b693b5ff6389c2d1d8aee88e4403143fac856

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

Compile new korean translations

https://github.com/tomasvana10/crossword_puzzle/commit/11e5af0eccbf6abb2b10c9cf5dfa4ae0b25d8dc8

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

Bump version

https://github.com/tomasvana10/crossword_puzzle/commit/3f507e9859b610239135239a3ea1ac4021ea2795
