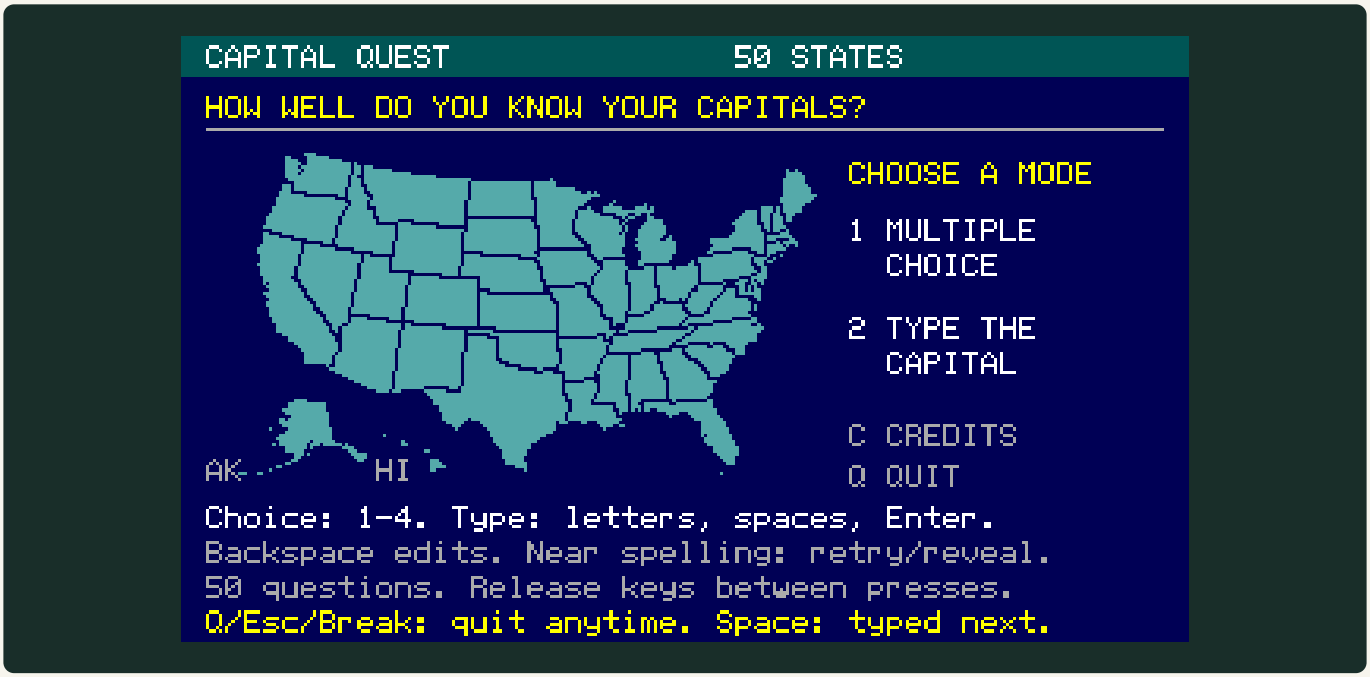
Capital Quest for CoCo

A player's guide to both quiz modes, the progress map, spelling help, and missed-answer review.



The Capital Quest title screen, captured in VCC Plus.

Download game disk

Source code

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Player's manual · November 12, 2026

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Capital Quest for CoCo

Capital Quest is a geography quiz about the 50 United States and their capitals. Follow the highlighted state on a color map, choose its capital or type the answer yourself, and watch the map record your progress. Every game asks about all 50 states once, in a shuffled order.

Start with multiple choice to learn the names and locations. Switch to typed answers when you want to recall a capital without seeing the choices. After the last question, review the states you missed and try another journey.

By Brian K. Holman. © Brian K. Holman 2026.

Get the game running

Use the **Download game disk** link accompanying this guide to get the November 12, 2026 quit-controls edition of `CAPITAL.DSK`. The online player guide offers the reading edition and reviewed PDF download. You can play the ready-made disk without compiling the source. The **Source code** link provides the editable project; see Make your own changes.

This guide describes the November 12 quit-key edition. Earlier downloads or cached Getting Started copies may still use `Esc` / `BREAK` to reveal a typed answer and allow `Q` only at menus. Use the current **Download game disk** for the new controls. The Getting Started update is queued for a later VCC Plus build.

Machine setup

Capital Quest needs this setup:

Item	Required setup
Computer	Color Computer 3
RAM	512 KB or more
Processor	MC6809; HD6309 also tested in VCC Plus
System	CoCo 3 BASIC with Disk BASIC and an FD-502 floppy controller
Disk	`CAPITAL.DSK` in floppy drive FD0, the CoCo's drive 0
Display	RGB is the tested color presentation
Input	Keyboard
Sound	Built-in CoCo sound; no sound cartridge needed

Use VCC Plus's normal CoCo 3 Disk BASIC setup and select at least 512 KB of RAM. This edition has been tested in VCC Plus 3.6.1 with both emulated processors. These emulator checks do not establish compatibility with a physical CoCo.

The 512 KB requirement comes from the graphics design. The game keeps one picture visible while drawing the next picture in a second buffer. Those buffers occupy a reserved 64 KB area outside a 128 KB machine's RAM. The game does not use all 512 KB, but this edition cannot run with only 128 KB.

Load the disk in VCC Plus

1. Start VCC Plus and select the machine setup above.
2. Open **Media → Floppy Disks...** and insert your copy of `CAPITAL.DSK` into **FD0**.
3. Save any existing work in the emulated CoCo before restarting it. Choose **Cold Restart** through the app's machine controls, then let BASIC reach its `OK` prompt.
4. Click the CoCo display to give it keyboard focus. Type `DOS` and press `Enter`.
5. When the Capital Quest title screen appears, press `1` for multiple choice or `2` to type the capitals.

The disk's DOS loader starts the game. If you need to load it explicitly, enter this command at the Disk BASIC prompt:

```
LOADM"CAPITAL.BIN":EXEC
```

The game does not write to its disk, so a write-protected copy is suitable for play. Keep your original download as a clean copy. You do not need to format the disk or add any files to it.

Choose a mode

The title screen shows the national map and four choices. It is also where **Play Again** returns you after a completed quiz.

Key	Title-screen action
`1`	Start a 50-question multiple-choice quiz
`2`	Start a 50-question typed-answer quiz
`C`	Read the credits
`Q`, `Esc` or CoCo `BREAK`	Quit to BASIC

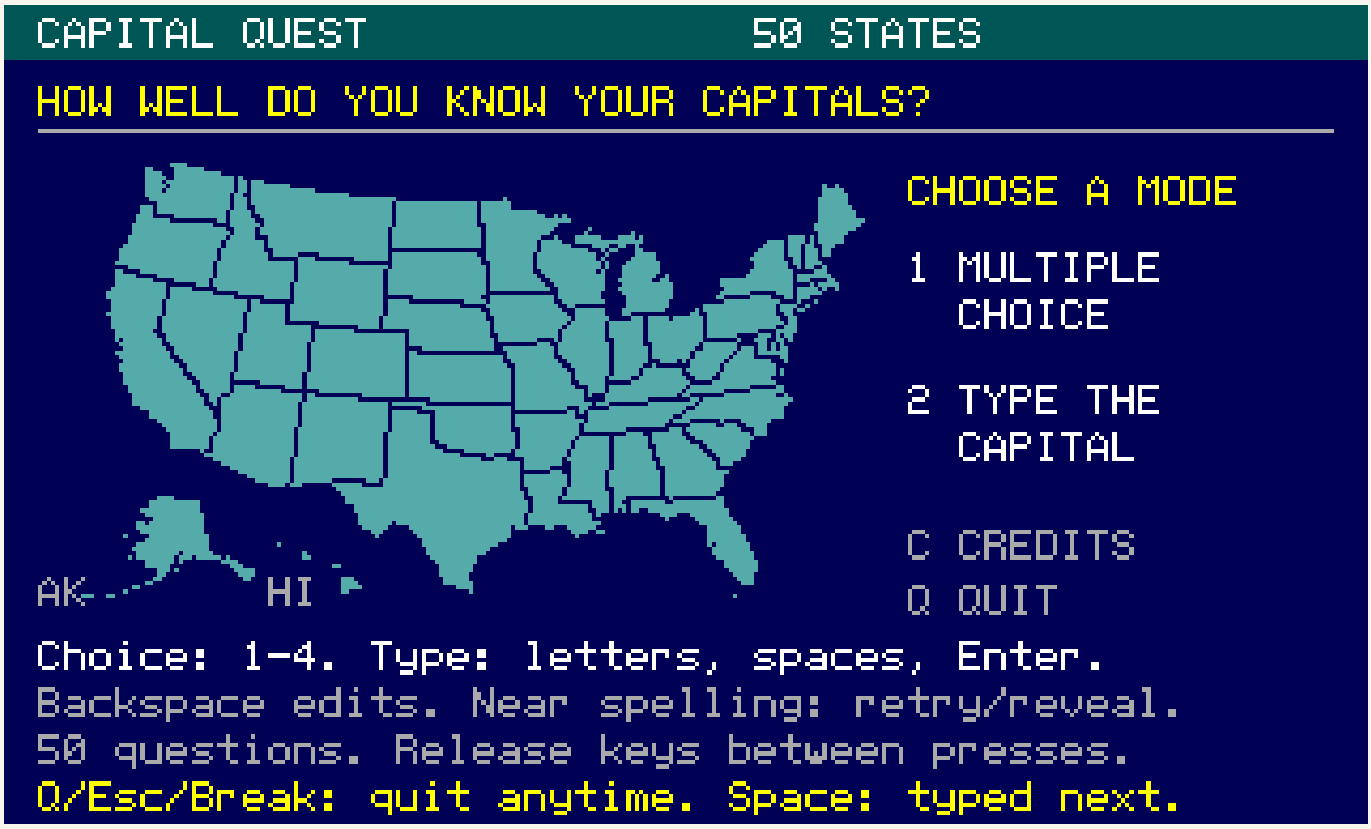


Figure 1: The Capital Quest title screen offers multiple choice, typed answers, credits, and Quit.

Choosing either quiz mode starts with zero points and a fresh map. All 50 states appear once. The state order is shuffled for each game; repeated play can still produce familiar stretches by chance. There is no difficulty menu, player-name entry, or timer that reduces your score. The two modes use the same states, capitals, map colors, and scoring.

The title map is light teal throughout. It does not carry over the colored answer history of a previous game.

Read the map

The top of a question screen identifies the mode, question number, and current score. Beneath the map, the game names the state and asks for its capital. Read that state name even when a very small state is hard to pick out on the national map.

Map color	Meaning
Light teal	You have not answered this state yet
Dark purple	You answered this state correctly
Red	You answered this state incorrectly or revealed its answer
Yellow	This is the state in the current question

The colors describe your answers, not regions of the country. They do not group states by geography, time zone, or political boundaries. A correct answer after a spelling correction counts as correct and becomes purple.

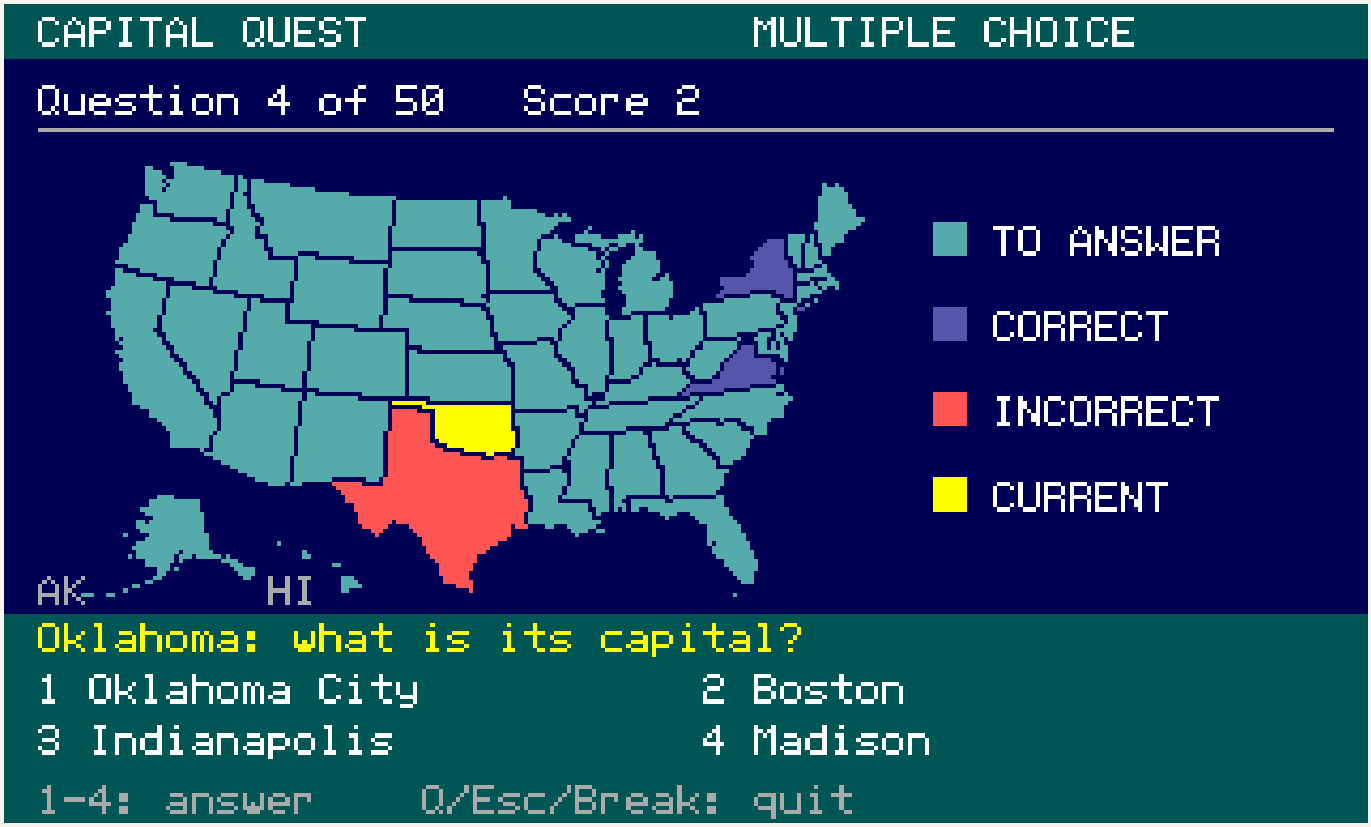


Figure 2: The progress map uses teal for unanswered states, purple for correct answers, red for misses, and yellow for the current question.

The current state stays yellow while its answer feedback is visible. Correct feedback already includes the new point in the header score. When the next question opens, the state you just answered changes to purple or red and the next state becomes yellow. The ordinary right-hand panel shows the four-color legend.

Northeast detail

For selected northeastern states, a larger **NORTHEAST** view replaces the legend. A yellow outline on the national map marks the enlarged area. Both views use the same progress colors, so you can see the small current state without losing its national location.

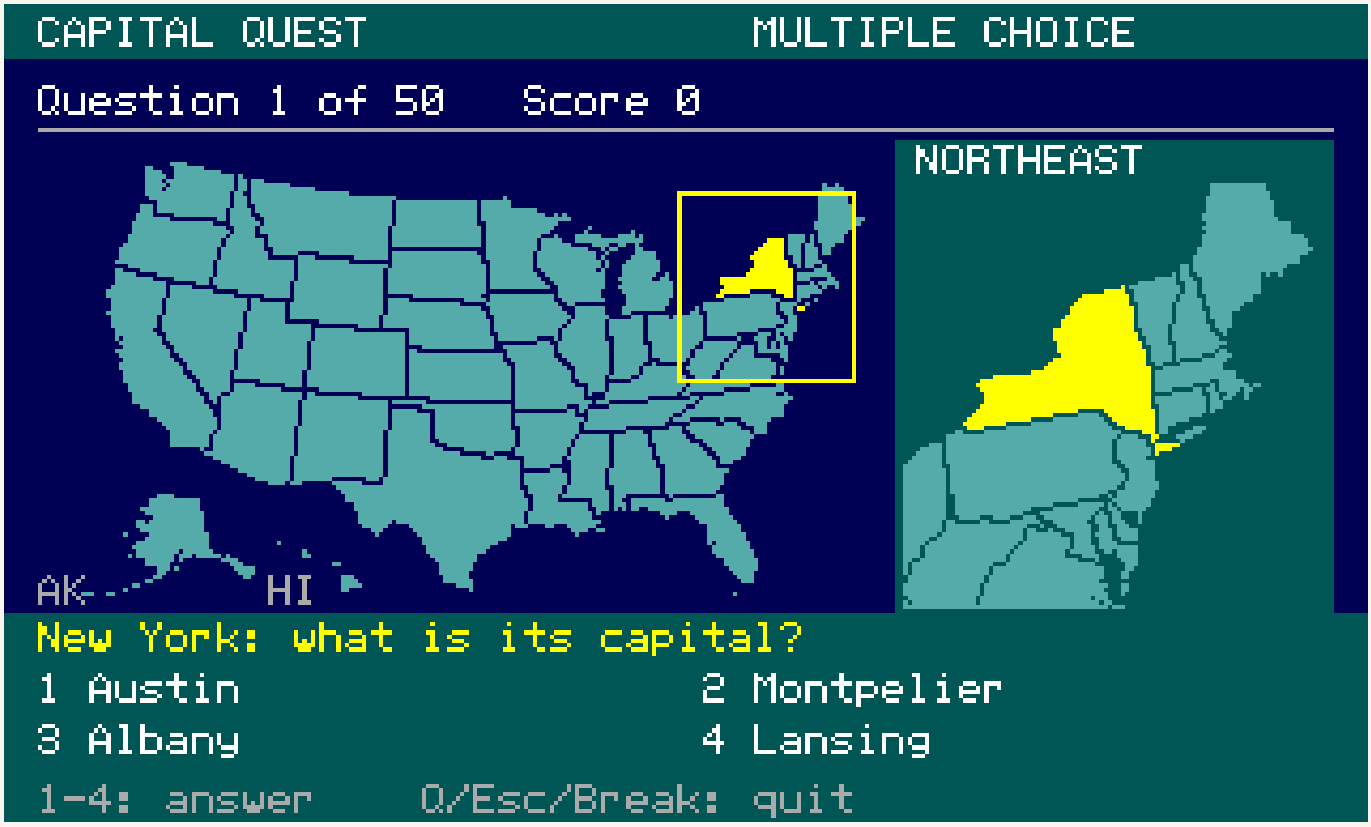


Figure 3: The Northeast detail enlarges small states while the national overview remains visible.

Alaska and Hawaii

Alaska and Hawaii appear as labeled insets on the national map. A Hawaii question also opens an enlarged **HAWAII** view on the right. The island shapes are simplified to fit the display.

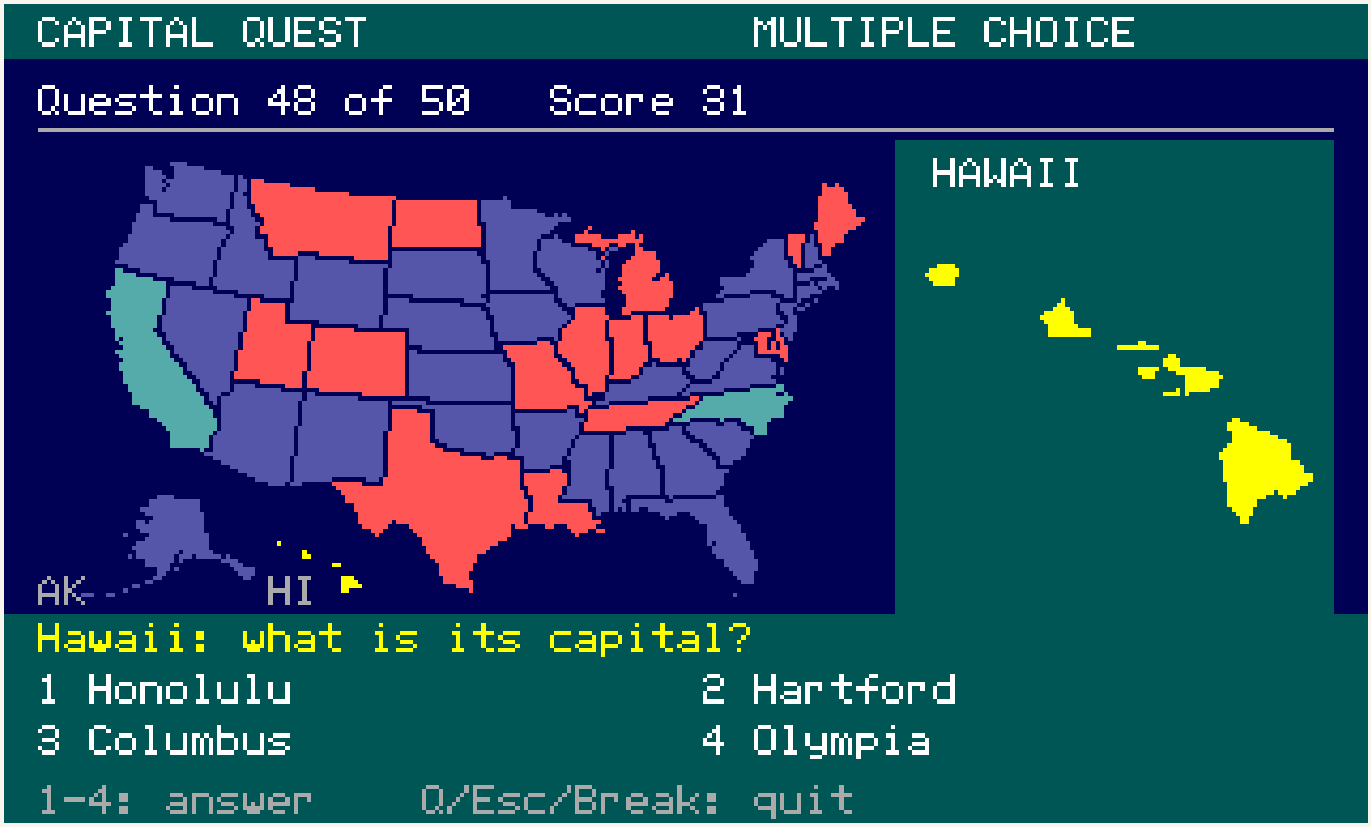


Figure 4: A Hawaii question shows an enlarged island view beside the national map.

The national map and its insets are learning aids. Alaska, Hawaii, and the enlarged views are not drawn to one common scale. Very small islands may disappear at the CoCo's screen resolution.

Play multiple choice

Press `1` at the title screen. Four different capitals appear: `1` and `2` above `3` and `4`. Exactly one is the highlighted state's capital.

Press its number, without `Enter`. The game shows the result and correct capital, then advances automatically.

`Q`, `Esc`, or CoCo `BREAK` quits without saving your score.

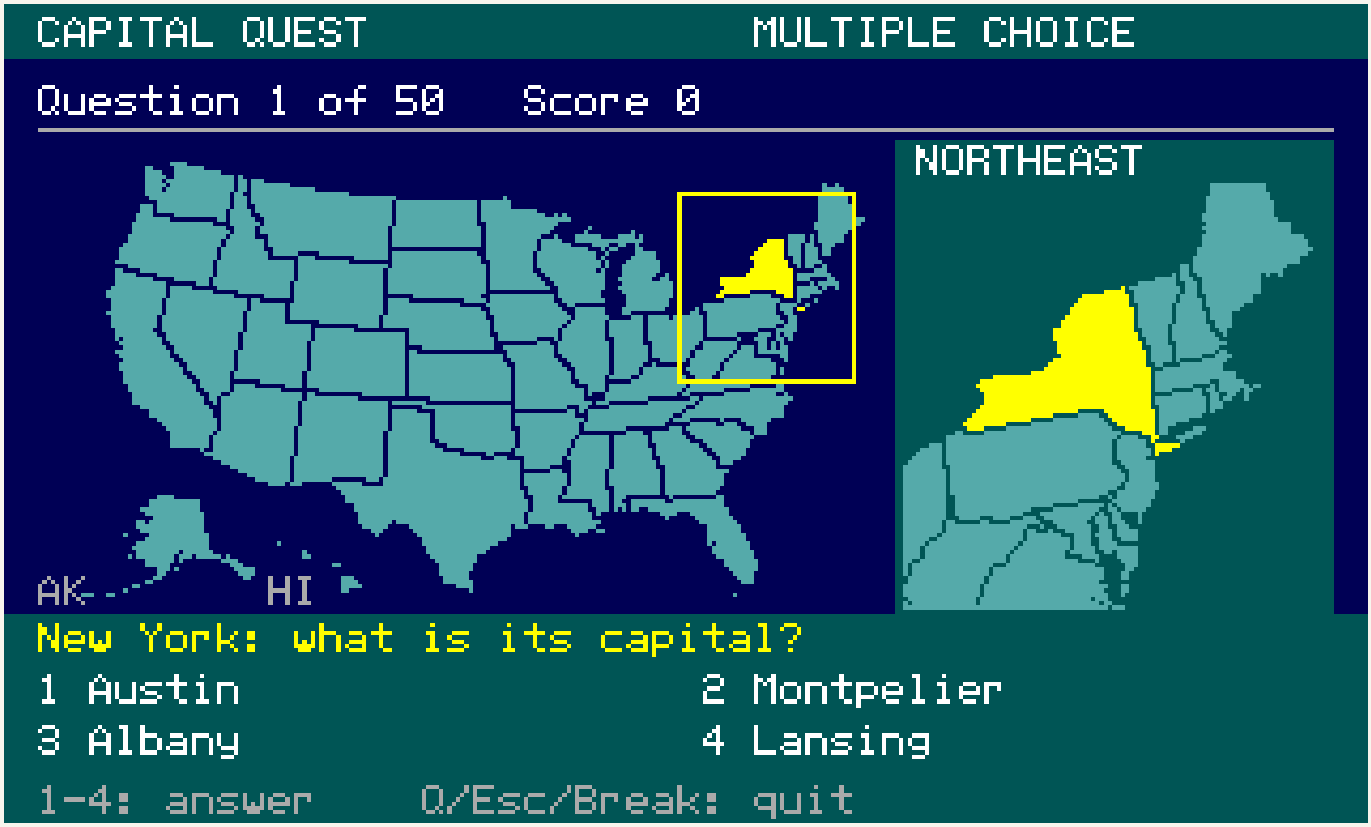


Figure 5: A multiple-choice question places four numbered capital choices below the highlighted state.

The correct answer starts in any of the four positions. On each following question, it is chosen randomly from the other three positions. For example, if the correct answer was `3`, it can be `1`, `2`, or `4` next, but it cannot be `3` again immediately. This follows the correct answer's position, even if you chose a different number. A new quiz starts this rule afresh.

Answer feedback

A correct answer displays **CORRECT!** and plays a rising pair of tones. An incorrect answer displays **NOT THIS TIME.** and plays a lower, falling pair. In both cases, the screen states the correct capital.

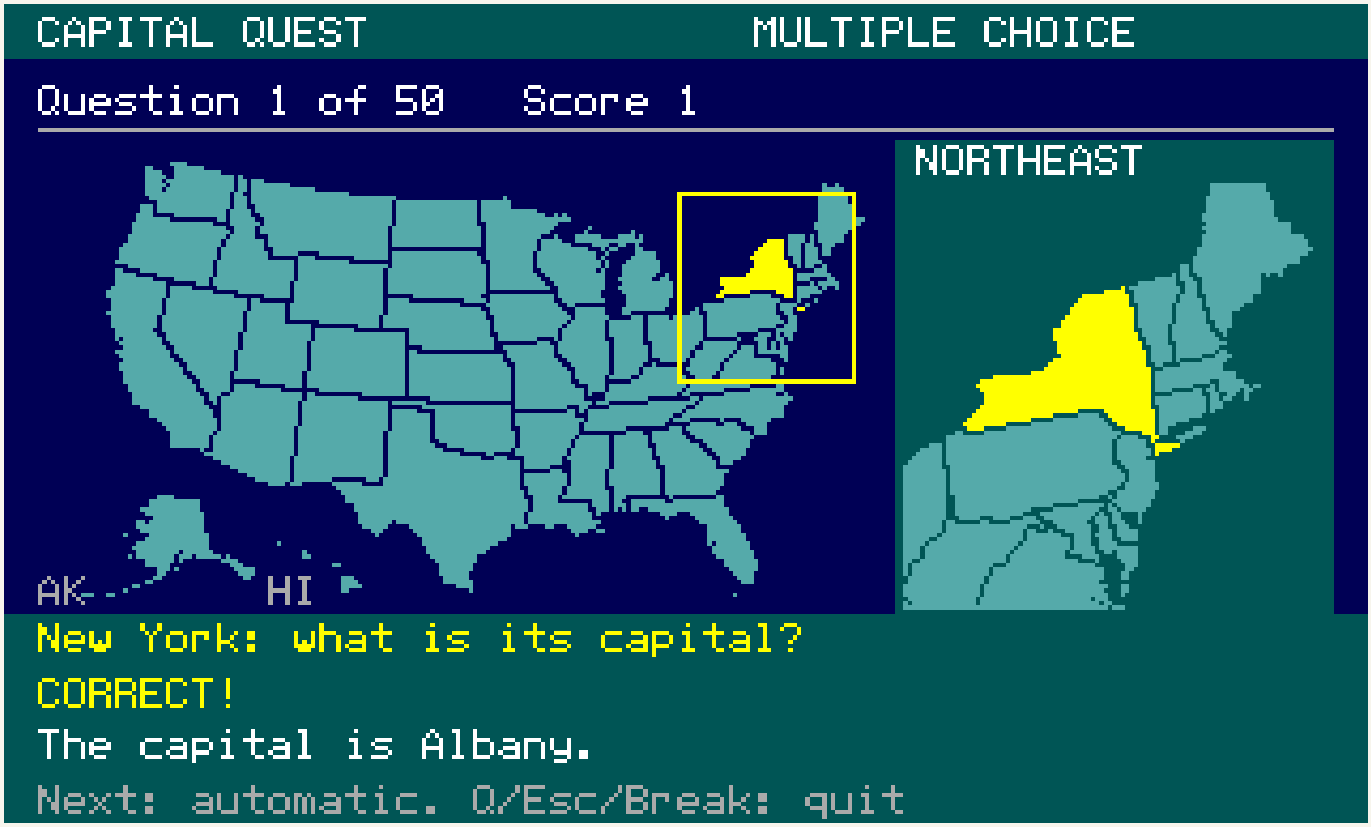


Figure 6: Correct-answer feedback confirms the result and names the capital.

After the sound, multiple-choice mode leaves about 1.5 seconds to read the feedback, then opens the next question. The reading pause also accepts `Q`, `Esc` and CoCo `BREAK` to quit. You do not need `Space` or `Enter` to continue.

Release the number key after choosing. A held key cannot submit an answer to the next question; let go before pressing its answer. You can take as long as you need while a question is waiting for a choice.

Type the capital

Press `2` at the title screen. The question appears without answer choices. Type the capital in the entry line, then press `Enter` to submit it.

Letters and spaces form the answer. Periods are also accepted for the supported **St. Paul** spelling. The underscore marks the end of your entry. `Backspace` removes the last character; continue typing to append a replacement. This is an end-of-line editor, not a movable text cursor. `Q` is reserved for quitting, including during typed entry.



Figure 7: Typed-answer mode shows an editable answer line and the keys for submission, correction, or reveal.

What counts as a match

Capital Quest ignores letter case. `Denver`, `DENVER`, and `denver` all match. Leading and trailing spaces are ignored, and repeated spaces between words are treated as one space. For example, an answer with extra spaces around **Salt Lake City** is accepted.

For Minnesota, **Saint Paul**, **St Paul**, and **St. Paul** are accepted. The period belongs in the abbreviated spelling shown here. Other punctuation changes and informal nicknames are not automatically accepted.

An exact match or accepted alias earns one point. Pressing `Enter` on a blank answer records a miss. Entering a different state's known capital is also a miss, even if its spelling happens to resemble the expected answer.

A close spelling

If the entry is close to the expected spelling, the game may offer a second look. The screen says **That looks close. Check your spelling** and offers:

Key	Spelling-prompt action
`R`	Return to the entry and edit the answer you already typed
`V`	Reveal the correct capital and record a miss

No point has been awarded at this prompt. Press `R`, use `Backspace` to remove the wrong ending, and type the correction. Press `Enter` again when ready. You do not have to retype the entire answer if only its ending needs changing.



Figure 8: The close-spelling prompt offers Retry or Reveal and says that no point has been awarded yet.

The spelling aid is a limited safety net. It does not recognize every possible typo. Short or substantially different answers can be marked incorrect immediately. Keep checking the state name: a correctly spelled capital for another state is not a spelling correction.

An accepted answer after `R` still earns one point. The results also count it under **correct after spelling correction**. That count describes part of your correct total; it is not a bonus added on top.

Reveal an answer

While editing a typed answer, press `Enter` with a blank entry to reveal the capital and record the question as incorrect. If you already typed something, clear it with `Backspace` first. The feedback names the capital, and the map will mark the state red on the next question. `Q`, `Esc`, and CoCo `BREAK` now quit the game rather than reveal an answer.

At the close-spelling prompt, use `V` to reveal instead. Revealing never earns a point. It can be useful when you want to see the answer and continue learning rather than keep guessing.

Entry length

The entry holds at most 39 characters, including spaces and periods. Extra characters are ignored and a message says **39 characters maximum. Backspace to edit.** Use `Backspace` to shorten the entry, or submit it with `Enter`. No state capital needs an entry this long.

Continue after a typed answer

Typed feedback uses the same result messages, capital display, and tones as multiple choice. It stays visible until you are ready to continue.

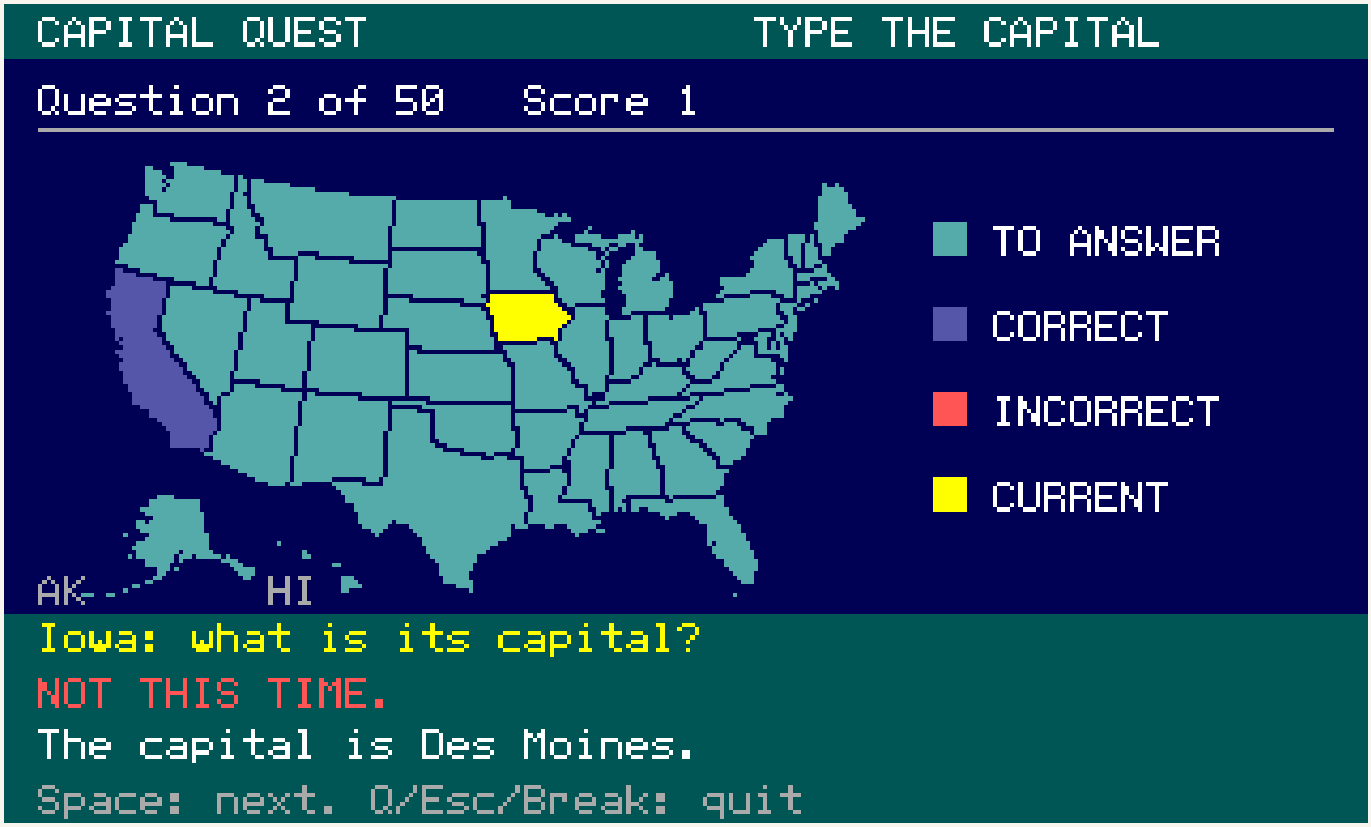


Figure 9: Incorrect typed-answer feedback gives the correct capital and waits for Space before continuing.

Release the key you used, read the answer, and press Space for the next question. The game does not advance typed feedback automatically. During entry, a space is part of the capital's name; it advances only when the feedback screen asks you to continue.

Understand your score

Each state is worth one point. A correct multiple-choice selection, a correct typed answer, or an accepted spelling correction earns that point. A wrong answer, blank submission, or reveal earns zero. There are no speed bonuses, time penalties, or negative points.

The score beside the question number is your correct-answer total so far. At the end, **YOUR RESULTS** shows:

- Your number correct out of 50.
- Your percentage: the correct total multiplied by two.
- How many correct answers followed a spelling correction.
- How many states you missed and can revisit.

For example, 40 correct answers produce 80 percent and 10 states to revisit. The maximum is 50 out of 50, or 100 percent. Each state contributes at most one point.

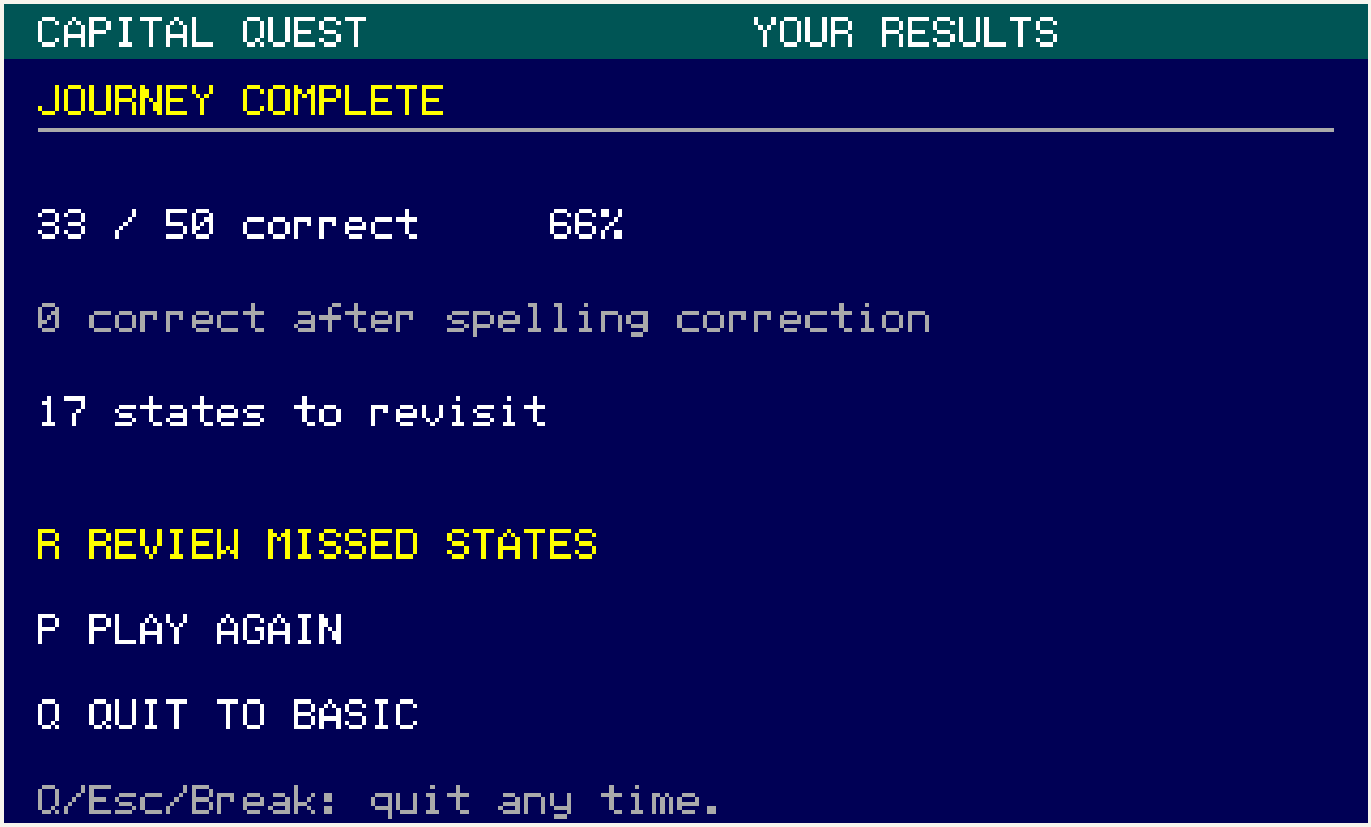


Figure 10: The results screen shows the correct total, percentage, spelling-correction count, and options to review, replay, or quit.

Key	Results-screen action
`R`	Review the missed states
`P`	Return to the title screen to choose another quiz
`Q`, `Esc` or CoCo `BREAK`	Quit to BASIC

Review missed states

Press `R` at the results screen. **MISSED STATES** lists up to three missed questions per page, in the order they appeared during your game. Each entry shows the state, your recorded answer, and its correct capital. A blank submission used to reveal the answer is shown as **[blank]**. If you used `V` after a close spelling, the review can show the text you had entered before revealing.

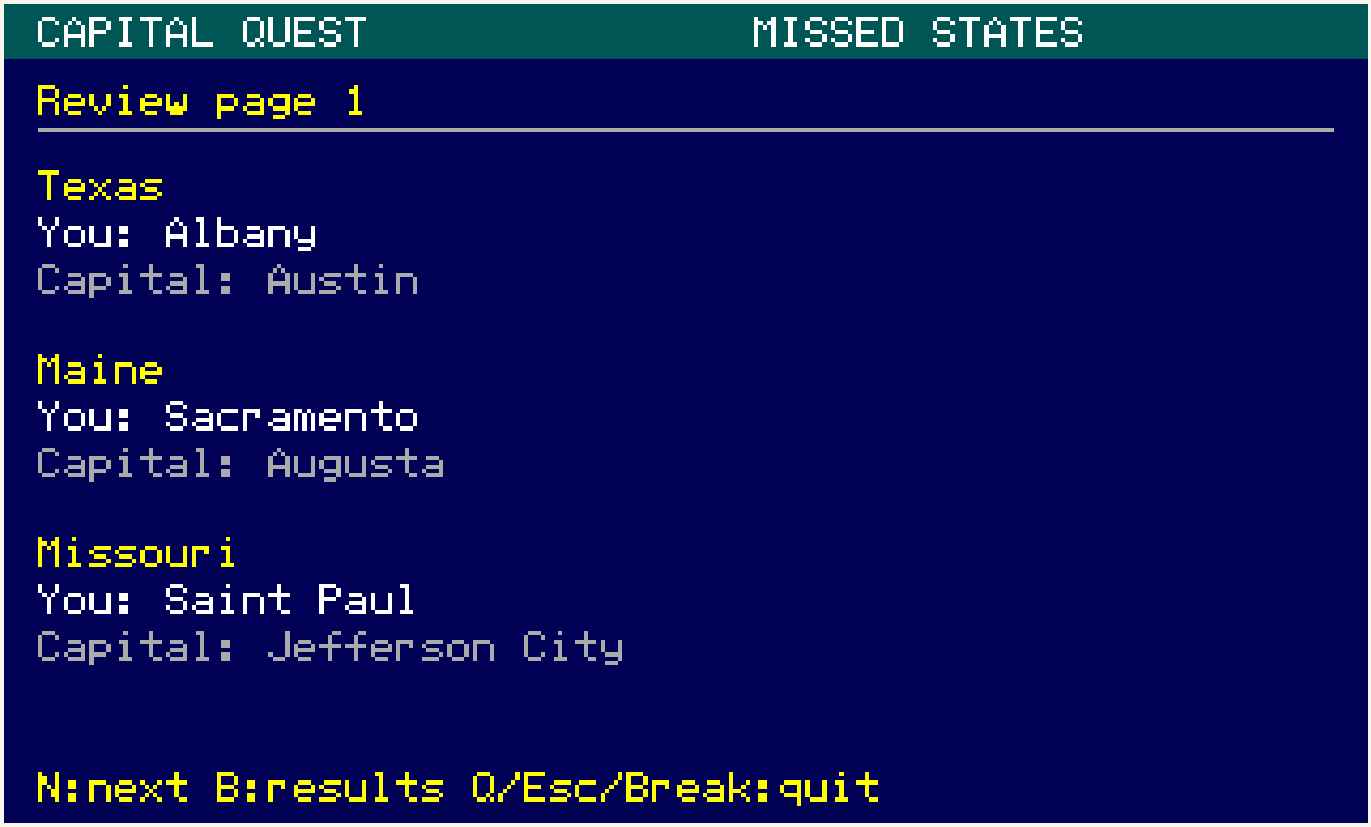


Figure 11: Missed-answer review lists the state, the player's answer, and the correct capital, with paging controls below.

When another review page is available, press `N`. Press `B` to return to the results screen. On the last page, use `B` to return or one of the global quit keys to leave. If you answered every state correctly, the review says **A perfect trip! No missed states.**

Reviewing does not ask the questions again and does not change your score. It lets you study the completed game's misses before replaying or quitting.

Replay, quit, and saved progress

At the results screen, `P` returns to the title. Choose `1` or `2` for a new quiz. The new game clears the score, answer history, spelling-correction count, and map colors, and shuffles all 50 states again. You can change modes between games.

Press `Q`, `Esc`, or the CoCo's `BREAK` key to quit from any screen: a question, typed entry, spelling help, feedback, review, credits, the title, or results. In VCC Plus, the Mac's `Esc` key supplies CoCo Break. The multiple-choice reading pause also checks these quit keys. `Q` is reserved for quitting even in typed mode.

The game uses the CoCo 3's high-speed clock during play. Quitting restores BASIC's text display, keyboard state and normal clock speed, prints **Thanks for playing Capital Quest!**, and returns to BASIC.

Capital Quest does not save games, results, high scores, or preferences to disk. Your current quiz and review exist only in the running session. Quitting, restarting the machine, or beginning a new quiz loses them. Take a screenshot of the results if you want a record.

There is no in-game settings screen or joystick mode. Use the keyboard controls in this guide. Display scaling and sound volume are controlled by VCC Plus rather than by a game settings menu.

Credits and licenses

Press `C` at the title screen to open **A MAP FOR EVERY STATE**. Press `Space` to return. The screen identifies the map source, its Creative Commons license, the adapted map work, and the font author.

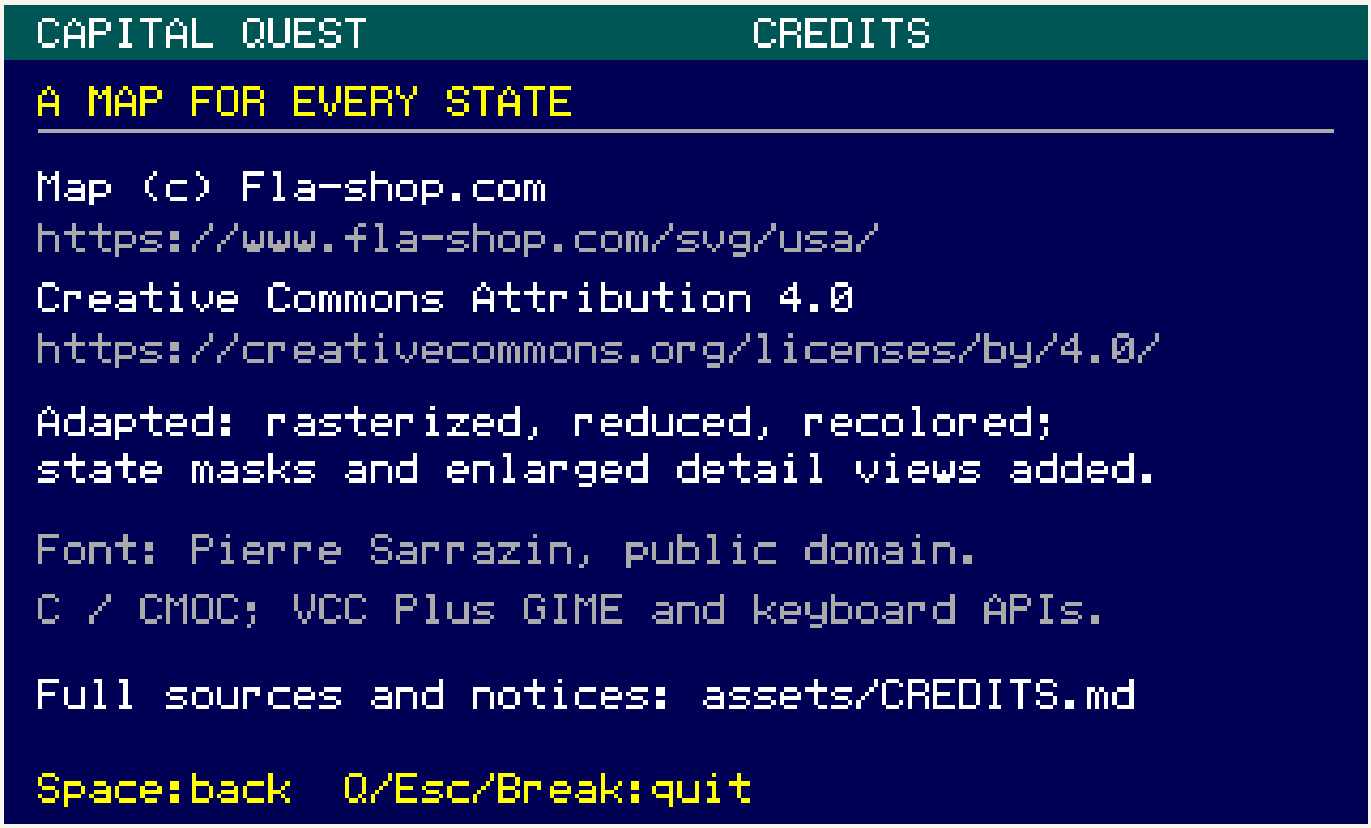


Figure 12: The credits screen identifies Fla-shop.com's map, its CC BY 4.0 license, the adaptations, and Pierre Sarrazin's font.

The map is **© Fla-shop.com**, used under Creative Commons Attribution 4.0 International. The original map and its source information are available from Fla-shop.com's United States SVG map.

The game adapts that map through state-region assignment, reduced resolution, simplified boundaries, recoloring, run-length encoding, and Northeast and Hawaii detail views. The insets are not to a common scale. The map's inclusion does not imply endorsement by its creator.

Pierre Sarrazin's **font5x8** is public domain. The disk boot helper is adapted from his public-domain **autostart.c 0.1.2**. CMOC, LWTOOLS, and the linked libraries retain their own authorship and notices. The source distribution includes `assets/CREDITS.md` and the component notice files; preserve them when sharing modified copies. The matching library-source companion provides the linked runtime, graphics, keyboard, and font sources with their original notices.

This manual is © Brian K. Holman 2026 and is released under the **GNU General Public License, version 3 or later**. The project includes the full license text. The map retains its CC BY 4.0 terms, and the public-domain font and boot helper retain their separate status.

Make your own changes

The **Source code** link accompanying this manual provides the editable C project. Keep an untouched copy of the approved disk and work in a separate, writable copy of the source. You can change the quiz's presentation or use it as a small learning project while preserving its licenses and attribution.

In VCC Plus, choose **Develop → C Development → Open** and select the extracted project folder containing `vccplus-project.json` and `Makefile`. Select **Release** and choose **Build**. The declared build target produces the

game disk. Use **Show Build Products** to find `build/CAPITAL.dsk` and `build/CAPITAL.bin` in the workspace's build snapshot, then test your new disk with the machine setup in Get the game running.

VCC Plus supplies the supported compiler and build tools for this workflow. You do not need Xcode, Homebrew, or a separate compiler installation merely to open and build this project in the app. Asset regeneration and optional host-side tests have additional requirements described in the source README; the generated drawing and state data are already included for ordinary builds.

If you connect ChatGPT to your personal project copy, review which files the connection shares and enable the project's Makefile workflow when building through that connection. Keep private connection files out of anything you share. Review suggested edits, build them, and test a separate disk copy before replacing a game you want to keep.

Troubleshooting

What you see	What to check
Requires 512 KB CoCo 3 in BASIC.	Select a CoCo 3 with at least 512 KB, start in ordinary BASIC text mode, and cold restart before loading. A 128 KB setup is insufficient for this edition.
`DOS` does not start Capital Quest	Confirm that the complete `CAPITAL.DSK` is in FD0 and that the machine has Disk BASIC with its floppy controller. Cold restart and try `DOS` again. The explicit `LOADM` command above is another loading route.
The game does not respond to keys	Click the CoCo display or use VCC Plus's **Input → Focus CoCo Display** command. Release the previous key before pressing a new one.
Typed feedback seems to be stuck	Read the feedback, release the previous key, and press `Space`. Typed feedback waits for you; multiple-choice feedback advances automatically.
A typed capital is marked wrong	Check the named state, the spelling, and the accepted Saint Paul forms. Case and extra spaces are ignored, but arbitrary abbreviations and punctuation are not.
There is no sound	Check the app's sound controls, Mac volume, and selected audio output. The feedback uses built-in CoCo sound and does not require an add-on sound cartridge.
The map's colors seem unexpected	Yellow is the current question, teal is unanswered, purple is correct, and red is incorrect. The current state remains yellow through feedback.
Graphics timer stopped.	The game could not complete a display update and has exited. Return to the standard BASIC setup, cold restart, and load the disk again.
A previous score is missing	Scores are not saved. A new quiz, quit, or machine restart clears the session's results.

Before restarting, preserve any other work in the emulated computer. Keep a clean downloaded disk and a separate copy for your own builds so that troubleshooting does not replace a project or program you want to retain.