

# MTG Automated Primers

...

Setup, Configuration,  
and Troubleshooting

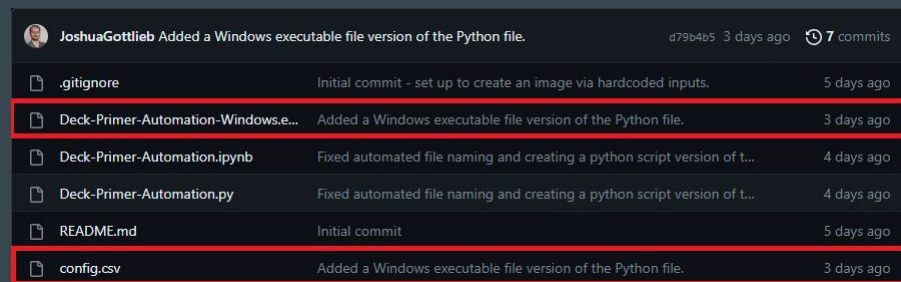
# Setup and Usage - Windows








To run the program on Windows, download the Deck-Primer-Automation-Windows.exe and config.csv files.

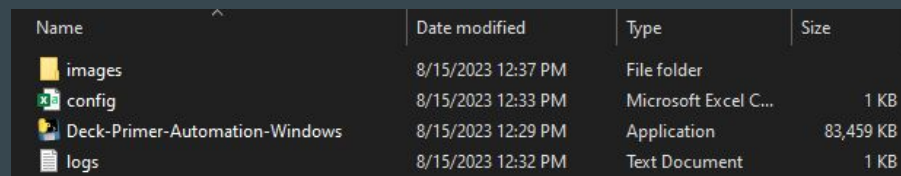
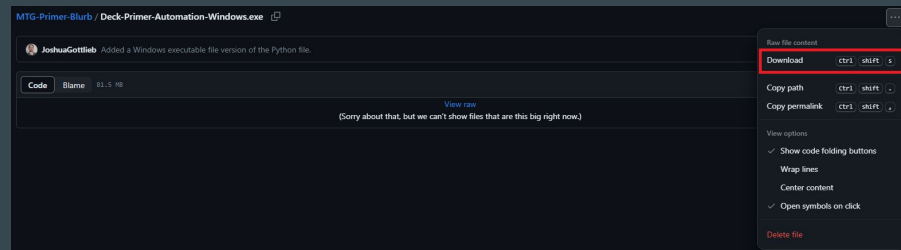
Make sure that the config.csv file is in the same directory/folder as the .exe file.

Configure your images by editing the config.csv file using the instructions in the following slides, then run the executable file.

Processed images will be placed in the images folder, which will be created if it does not exist. Information about the processed images will be placed into logs.txt which is automatically created.



 JoshuaGottlieb	Added a Windows executable file version of the Python file.	d79b4b5 3 days ago	7 commits
 .gitignore	Initial commit - set up to create an image via hardcoded inputs.	5 days ago	
 Deck-Primer-Automation-Windows.exe	Added a Windows executable file version of the Python file.	3 days ago	
 Deck-Primer-Automation.ipynb	Fixed automated file naming and creating a python script version of t...	4 days ago	
 Deck-Primer-Automation.py	Fixed automated file naming and creating a python script version of t...	4 days ago	
 README.md	Initial commit	5 days ago	
 config.csv	Added a Windows executable file version of the Python file.	3 days ago	



Name	Date modified	Type	Size
images	8/15/2023 12:37 PM	File folder	
config	8/15/2023 12:33 PM	Microsoft Excel C...	1 KB
Deck-Primer-Automation-Windows	8/15/2023 12:29 PM	Application	83,459 KB
logs	8/15/2023 12:32 PM	Text Document	1 KB

# Setup and Usage - Linux and MacOS

The program runs in Python, which can be downloaded [here](#). The program works as of Python 3.8.10. You will also need the following Python packages and versions or newer:

matplotlib 3.6.2, opencv-python 4.8.0.76, pandas 1.5.2, Pillow 9.4.0, Qrcode 7.4.2

You can install these by entering the following command in Terminal on MacOS or your Linux version of a bash shell:

```
pip install matplotlib==3.6.2 opencv-python==4.8.0.76 pandas==1.5.2 Pillow==9.4.0 qrcode==7.4.2
```

Instead of the .exe file, you will need the Deck-Primer-Automation.py and config.csv files in the same directory. Navigate to the directory in your terminal of choice using the cd command, and run the program by typing: ./Deck-Primer-Automation.py

# Configuration CSV File

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	image_name	title_text	points_text	summary_text	back_title_text	back_body_text	qr_url	bold_words	bullet_points	title_font_scale	title_font_color	title_line_spacing	points_font_scale	points_font_color	points_line_spacing	summary_font_size	summary_font_color
2																	
3		Required Parameters								Optional Parameters							
4																	

There are 2 sets of parameters, required parameters and optional parameters. If you leave the optional parameters blank, default values will be used. Each row will produce a separate set of image triples (front, back, and QR code). The image size is 4488 x 3288 pixels (width, height), with a background color of (34, 34, 34) in RGB values. Neither of these values can be modified under the current version (as of 2023/08/14).

**image\_name:** Denotes the name to use for the image files created. If left blank, defaults to image\_{row\_number - 1}. Illegal file name characters and spaces will be replaced by underscores (\_).

# Required Parameters - Front Image

**title\_text:** Text placed in the title box.

**points\_text:** Text placed in the points box. The "Points: " prefix cannot be modified. Each pointed card must be separated by a semi-colon (;).

The output on the right is generated by:

Time Vault (7); Dig Through Time (1); Intuition (1); Mystical Tutor (1)

**summary\_text:** Text placed in the summary box.


**qr\_url:** Url embedded into QR code in the bottom right corner. The **QR info text** cannot be modified.

Azorius (UW) Time Vault

Points: Time Vault (7), Dig Through Time (1), Intuition (1), Mystical Tutor (1)

Time Vault is a control-combo deck that seeks to assemble Time Vault with a card which untaps Time Vault to take infinite turns. A robust set of counterspells and removal are used to buy time to assemble the combo.

Scan the QR code on the right to see the full deck list on Moxfield. For more information, see the other side of this card.



# Required Parameters - Back Image

**back\_title\_text:** Text placed in the back title box.

**back\_body:** Text placed in the back body box.

Separate paragraphs (denoted by bullet points on the right) are created by using the sequence \p. Make sure there are no spaces between paragraphs.

The output on the right is generated by:

Intuition can be used to get Time Vault, Sevinne's Reclamation, and Voltaic Key or Manifold Key. Alternatively, you can ensure getting an untapper by searching for Voltaic Key, Manifold Key, and Sevinne's Reclamation.\pUrza's Saga is a powerful card, as it tutors Voltaic Key or Manifold Key directly to the battlefield. Tezzeret the Seeker is another powerful piece, as he can tutor for Time Vault with his -X ability and untap it with his +1 ability.\pSometimes it is best to hold your combo pieces in hand, as your pieces are vulnerable to artifact removal while in play. There are redundant untappers but there is only one Time Vault, so consider deploying Time Vault last.

## Tips

- Intuition can be used to get Time Vault, Sevinne's Reclamation, and Voltaic Key or Manifold Key. Alternatively, you can ensure getting an untapper by searching for Voltaic Key, Manifold Key, and Sevinne's Reclamation.
- Urza's Saga is a powerful card, as it tutors Voltaic Key or Manifold Key directly to the battlefield. Tezzeret the Seeker is another powerful piece, as he can tutor for Time Vault with his -X ability and untap it with his +1 ability.
- Sometimes it is best to hold your combo pieces in hand, as your pieces are vulnerable to artifact removal while in play. There are redundant untappers but there is only one Time Vault, so consider deploying Time Vault last.

# Optional Parameters - Margins, QR, Offsets, and Line Spacing

**top\_margin**: Integer, top margin. Default 400.

**bot\_margin**: Integer, bottom margin. Default 400.

**left\_margin**: Integer, left margin. Default 400.

**right\_margin**: Integer, right margin. Default 400.

**qr\_size**: Integer, height and width of QR code. Default 600.

**qr\_offset**: Integer, distance between QR code and text. Default 75.


**line\_break\_spacing**: Integer, distance between sections and line breaks. Default 35.

Azorius (UW) Time Vault

Points: Time Vault (7), Dig Through Time (1), Intuition (1), Mystical Tutor (1)

Time Vault is a control-combo deck that seeks to assemble Time Vault with a card which untaps Time Vault to take infinite turns. A robust set of counterspells and removal are used to buy time to assemble the combo.

Scan the QR code on the right to see the full deck list on Moxfield. For more information, see the other side of this card.



# Optional Parameters - Title and Points Text

**title\_font\_scale**: Float, the font scale. Default 6.0.

**title\_font\_color**: Integer, controls the brightness of the font. Note the background has brightness 34. Default is 255. Color is not currently supported.

**title\_line\_spacing**: Float, controls line spacing. Multiplier to font size. Default 1.2.

**points\_font\_scale**: Float, the font scale. Default 5.0.

**points\_font\_color**: Integer, controls the brightness of the font. Default is 220.

**points\_line\_spacing**: Float, controls line spacing. Multiplier to font size. Default 1.2.

**Azorius (UW) Time Vault 4c Sans B**  
**(WURG) Seeker Walk**

**Points: Time Vault (7), Dig Through Time (1),**  
**Intuition (1), Mystical Tutor (1)**

Time Vault is a control-combo deck that seeks to assemble Time Vault with a card which untaps Time Vault to take.

Scan the QR code on the right to see the full deck list on Moxfield. For more information, see the other side of this card.





# Optional Parameters - Summary Text and Bold Words

**summary\_font\_scale**: Float. Default 6.0.

**summary\_font\_color**: Integer. Default is 255.

**summary\_line\_spacing**: Float. Default 1.2.

**bold\_words**: Phrases to be bolded in the summary and back body text boxes. Each phrase needs to be separated by a semi-colon (;). Make sure there are no spaces between phrases.

The output on the right and on previous slides is generated by:

Time Vault;Intuition;Sevinne's Reclamation;Voltaic Key;Manifold Key;Urza's Saga;Tezzeret the Seeker

Azorius (UW) Time Vault 4c Sans B  
(WURG) Seeker Walk

---

Points: Time Vault (7), Dig Through Time (1),  
Intuition (1), Mystical Tutor (1)

**I** Time Vault is a control-combo deck that seeks to assemble **I**  
Time Vault with a card which untaps Time Vault to take.

---

Scan the QR code on the right to see the full  
deck list on Moxfield. For more information, see  
the other side of this card.



# Optional Parameters - Back Text, Paragraphs, and Bullet Points

**back\_title\_font\_scale**: Float. Default 6.0.

**back\_title\_font\_color**: Integer. Default is 255.

**back\_title\_line\_spacing**: Float. Default 1.2.

**back\_body\_font\_scale**: Float. Default 3.5.

**back\_body\_font\_color**: Integer. Default is 180.

**back\_body\_line\_spacing**: Float. Default 1.1.

**Paragraph\_spacing**: Spacing between paragraphs, a multiple of back\_body\_line\_spacing. Default 1.5.

**bullet\_points**: Boolean flag to include bullet points. 1 includes bullet points, 0 removes them. Default 1.

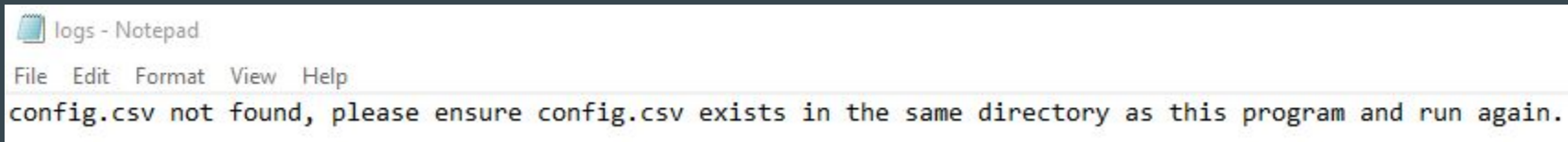
## I Tips and Spellseeker Combo (3WUU) and Lorem Ipsum Dolor Est I

---

1. Cast Spellseeker, tutor for Ephemerate. I
2. Cast Ephemerate on Spellseeker. Tutor for Time Walk.
3. Cast Time Walk for 1U and pass to your extra turn.
4. Ephemerate rebounds on Spellseeker. Tutor for Neoform.
- I 5. Cast Neoform for UG, sacrificing Spellseeker. Put Timeless Witness into play, and rebuy Ephemerate. I
6. Cast Ephemerate on Timeless Witness, rebuy Time Walk.
7. Cast Time Walk for 1U and pass to your extra turn.
8. Ephemerate rebounds, targeting Timeless Witness.

# Troubleshooting - Nothing Created

If nothing is created, the most likely cause is that you do not have config.csv in the same directory as your .exe or .py file. The log file should look like the image below.



# Troubleshooting - Extra Space On Bottom

If your image has extra space along the bottom, it means that your image does not have enough text at the current font size and line spacing.

The program makes it so each section is tightly connected, so if there is not enough text it will create an awkward amount of space along the bottom. Also, the program automatically downscales text which is too large in order to keep each section within certain size limits.

Currently the lower font scale bound cannot be modified, so consider adding more text or increasing font scales or line spacing.

## Izzet (UR) Tempo

---

Points: Ancestral Recall (7), Mystical Tutor (1),  
Price of Progress (1), True-Name Nemesis (1)

Izzet Tempo is a deck which seeks to land a threat or two and protect it via cheap and abundant countermagic, while dealing with onboard threats through the use of burn spells.

---

Scan the QR code on the right to see the full deck list on Moxfield. For more information, see the other side of this card.



# Troubleshooting - Text Too Small

If your text is too small, it is because the program attempted to downscale the font size due to too much text.

The log file will show something along the lines of "Exceeded maximum bounding box" and will show the font scale it has selected to compensate.

To remedy this issue, either remove some text or alter the line/paragraph spacing parameters in the configuration file.

## Tips

- Izzet Tempo is a threat–light deck. Consider mulliganing hands that do not contain a threat or **Ancestral Recall**.
- Prioritize fetching **Islands** and hold onto your blue fetches (fetchlands that can get **Islands**) if you can, as **Mystic Sanctuary** is a powerful land with the **Island** sub-type that can rebuy a key spell later in the game.
- **Price of Progress** is a premier finisher for the deck, as it will often do 4–10+ damage. Be careful though, as it usually does at least 4 damage to you as well.
- **Brainstorm** is a powerful card, but it has little value without a shuffle effect. Despite being an instant, using **Brainstorm** at sorcery speed is often more useful.
- Sometimes it is best to hold your combo pieces in hand, as your pieces are vulnerable to artifact removal while in play. There are redundant untappers but there is only one **Time Vault**, so consider deploying **Time Vault** last.

```
Processing ur_tempo.  
Calculating bounding boxes for ur_tempo.  
Saving ur_tempo QR code.  
Reached minimum font scale for QR Text.  
Exceeded maximum bounding box for Points Text. Recalculating with font scale 4.5.  
ur_tempo points text is smaller than the points prefix, recalculating.  
Reached minimum font scale for Points Prefix.  
Reached minimum font scale for Points Text.  
Exceeded maximum bounding box for Back Body Text. Recalculating with font scale 3.0.  
Saving ur_tempo.
```

# Troubleshooting - Image Empty

If your image is empty, that means that the program was unable to down scale the text enough to fit the text within the image.

The log file will show "Back/Front text uses too much vertical space."

To remedy this issue, either remove some text or alter the line/paragraph spacing parameters in the configuration file.

```
Processing ur_tempo_ultra_long.  
Calculating bounding boxes for ur_tempo_ultra_long.  
Saving ur_tempo_ultra_long QR code.  
Reached minimum font scale for QR Text.  
Exceeded maximum bounding box for Points Text. Recalculating with font scale 4.5.  
ur_tempo_ultra_long points text is smaller than the points prefix, recalculating.  
Reached minimum font scale for Points Prefix.  
Reached minimum font scale for Points Text.  
Exceeded maximum bounding box for Back Body Text. Recalculating with font scale 3.0.  
Back text uses too much vertical space.  
Saving ur_tempo_ultra_long.
```