Using the Michigan FPS Booklet Writing Application for the 2021 Michigan State Bowl

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Introduction

Due to COVID 19 risks and restrictions the Michigan Future Problem Solving State Bowl is being held virtually. After providing some background information, this document provides the information needed to use the MiFPS booklet writing software (called BookletWriter) to efficiently write booklets online. The steps include:

- Preparing to use BookletWriter – steps to perform before the day of writing for state bowl;
- Using BookletWriter to enter a booklet; and
- Sending the booklet back for evaluation.

Paper entry of booklets remains an option if the booklet can be scanned and emailed to the Michigan FPS State Bowl Coordinator.

Background

What Do I Need to Use BookletWriter?

BookletWriter can be used on a PC (Windows or Linux) or Macintosh computer. Chromebooks are not currently supported, but may be in the future.

An internet connection provides the easiest way to install BookletWriter. However, once installed it can be used offline or online depending upon your situation.

Offline use is ideal for individual booklet writers, it does not have the overhead of coordinating multiple users.

Online use is suggested for teams. All team members can contribute to the booklet simultaneously. The application uses Google Docs behind the scenes to store the booklet. However, the Google Docs web page interface should not be used to edit the document. The document does not appear as a normal text document. Editing it using the Google Docs web page will likely corrupt the document.

Why Use BookletWriter instead of the Google Docs Web Page?

Some important differences between the MiFPS booklet writing application (called BookletWriter) and the Google Docs we interface are:

- BookletWriter does not encounter delays while typing. During practice problems, participants complained that the Google Docs web page would not keep up with their typing, causing delays. BookletWriter never interrupts typing, it waits until a user moves to a new field in the booklet to merge the copies of the document.

- BookletWriter does not require an internet connection.
- BookletWriter makes automatic backups in case of catastrophe.
- BookletWriter reinforces the ideals of Future Problem Solving by not allowing previously written material to be copy and pasted into the booklet. Teams must type the booklet content during the allotted time.
- BookletWriter encourages clarity of writing by limiting the number of characters in each response field.
- BookletWriter encodes the information provided by the participants so that no other team can read their ideas, even if they gain access to the Google Docs document.
- BookletWriter looks like the paper booklet form, making it easier for both participants and evaluators.

Preparing to Use BookletWriter

Two software items are needed to use BookletWriter:

- The BookletWriter application;
- Java runtime version 11 or later (Java SDK also works, it contains more than is needed).

The rest of what is needed to run BookletWriter is information that will be provided just prior to booklet writing.

Obtaining the BookletWriter Application

The booklet writer application can be obtained from DropBox at
https://www.dropbox.com/s/fcqr36oek4eksx5/BookletWriter8.jar?dl=0 .

 It is also available on the Michigan FPS Web Site Downloads page at
http://www.michiganfps.org/downloads

Download the file and place it in a convenient location. You can put it on the desktop if you like. The filename is **BookletWriter11.jar**.

NOTE: Mac users need to download and use BookletWriter15.jar
https://www.dropbox.com/s/fwsyry5eiz7xieg/BookletWriter15.jar?dl=0 or from
http://www.michiganfps.org/downloads. Apple disables capabilities in earlier versions of Java, making it impossible to write files with the Java 11 version used in BookletWriter11.jar

Testing on Your Computer

If you are connected to the internet and double-click on the icon for **BookletWriter11.jar** your web browser should open to start the process of authorizing Google Docs to use BookletWriter with your email address. This process is described below in the *section Authorizing the use of BookletWriter*. You can skip the instructions for installing Java.

If you aren't connected to the internet, then the first form of BookletWriter should appear, as shown in Figure 7.

If neither of the above outcomes occur, open a terminal window and enter the command

```
java -version
```

If the java command is not found or the version is less than 11, it is time to install java.

Installing Java (If Needed)

The official download for Java 11 can be found at go to
https://www.oracle.com/java/technologies/javase/jdk11-archive-downloads.html .

YouTube has videos with instructions to help with this. For Windows 10, try
https://www.youtube.com/watch?v=1ZbHHLobt8A or
https://www.youtube.com/watch?v=wcZj4JH6lbQ

For Mac, try https://www.youtube.com/watch?v=pNDLX2KUYwk .

If you are using Linux, java can be installed using *apt* or *yum* or the software management graphical application for your system.

Authorizing the use of BookletWriter

Most likely you won't see the first form of BookletWriter at first, you will need to authorize Google Docs to let you use BookletWriter (assuming you are connected to the internet). The first page is similar to what is shown in Figure 1. The process of authorizing BookletWriter in Google Docs looks like a rather long and tedious process, but it only takes a couple of minutes and you only have to do it once! You will want to do this before the clock starts ticking on the day of State Bowl.
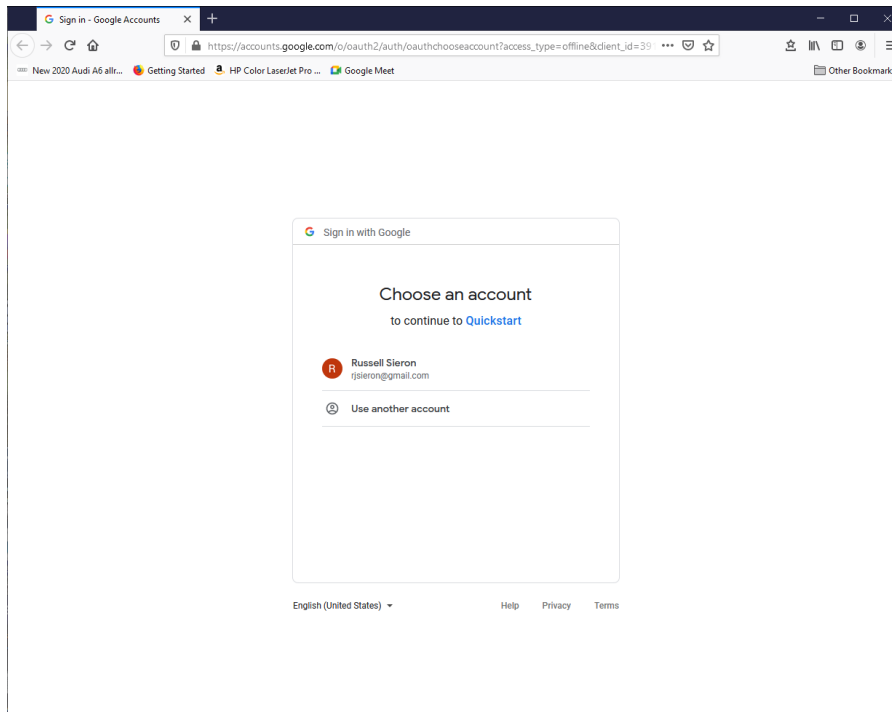

Figure 1 The first step of authorizing with Google Docs

Click on the email account that your coach expects you to use, you should see a new web page that looks like what is shown in Figure 2.
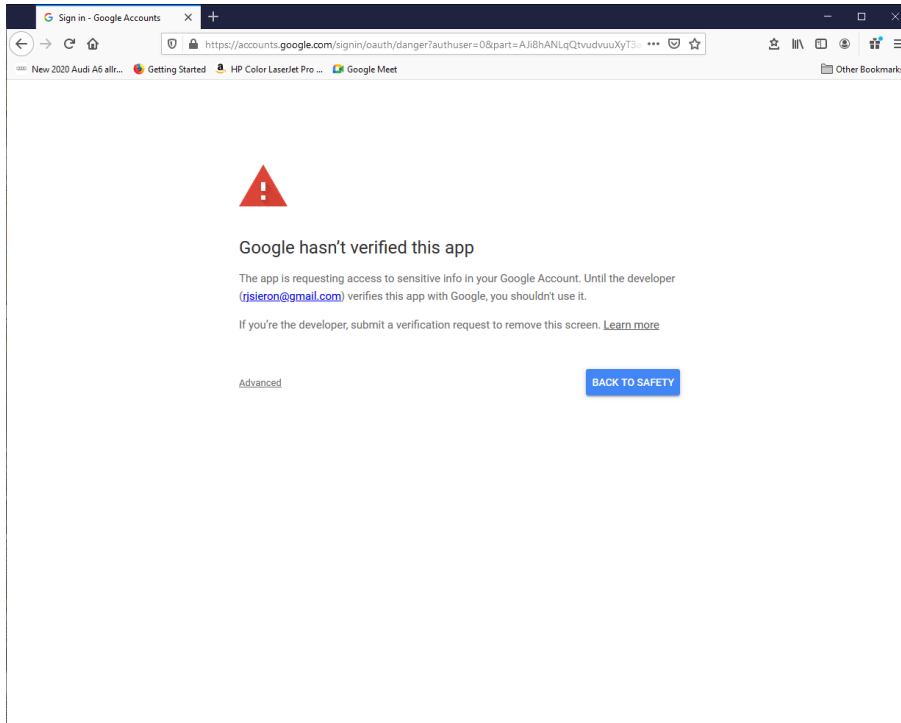

Figure 2 The second step of authorizing with Google Docs

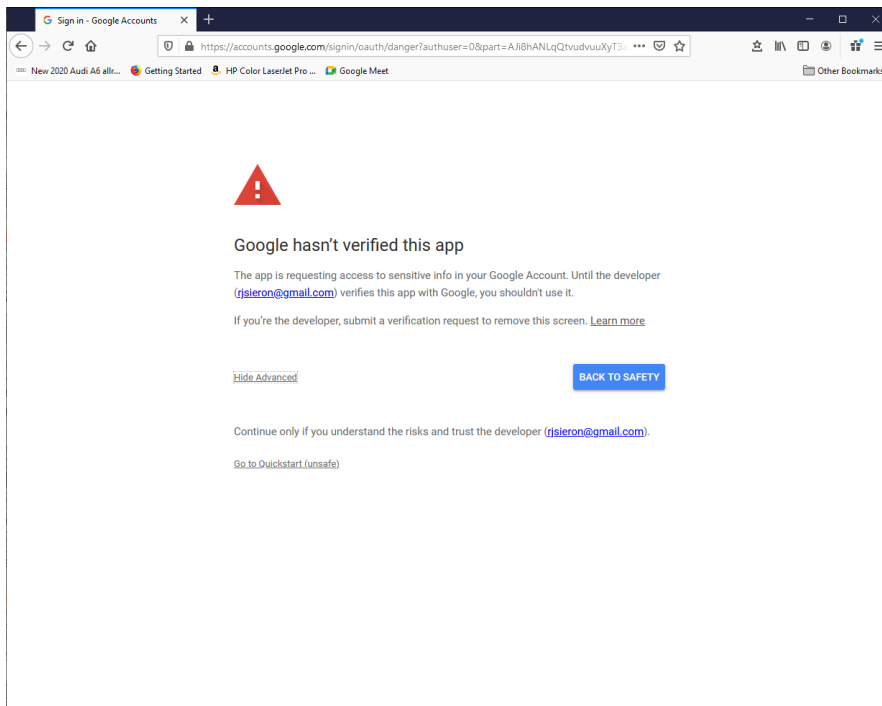Click on the word *Advanced* in the lower left. The web page will change to look like the one in Figure 3

Figure 3 The third step of authorizing with Google Docs

Click on *Go to Quickstart (unsafe).* The browser will change to look like the one shown in Figure 4.
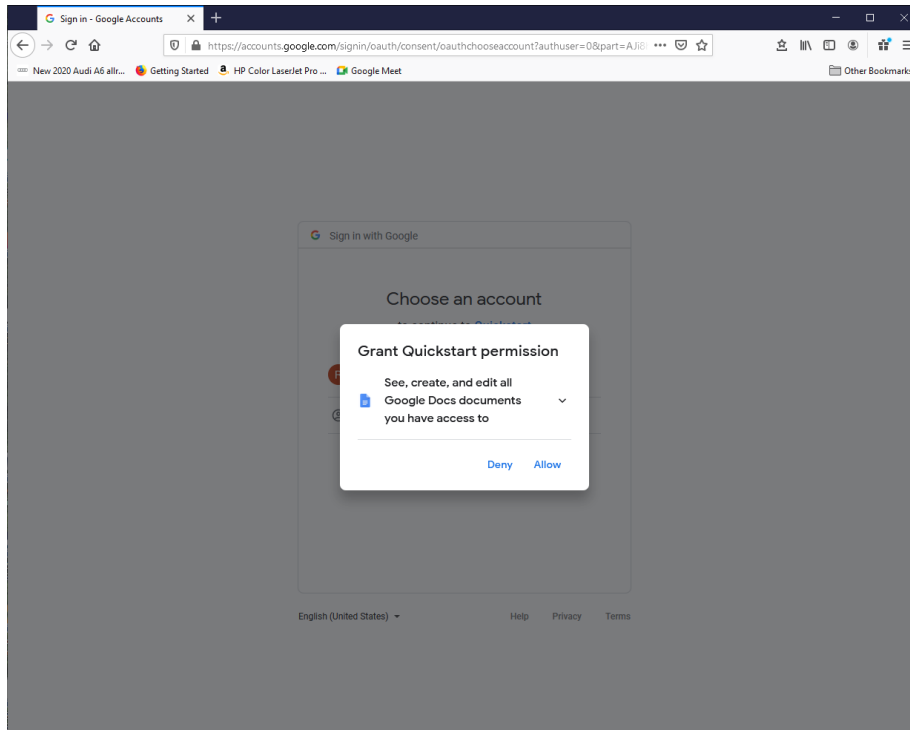

Figure 4 The fourth step of authorizing Google Docs

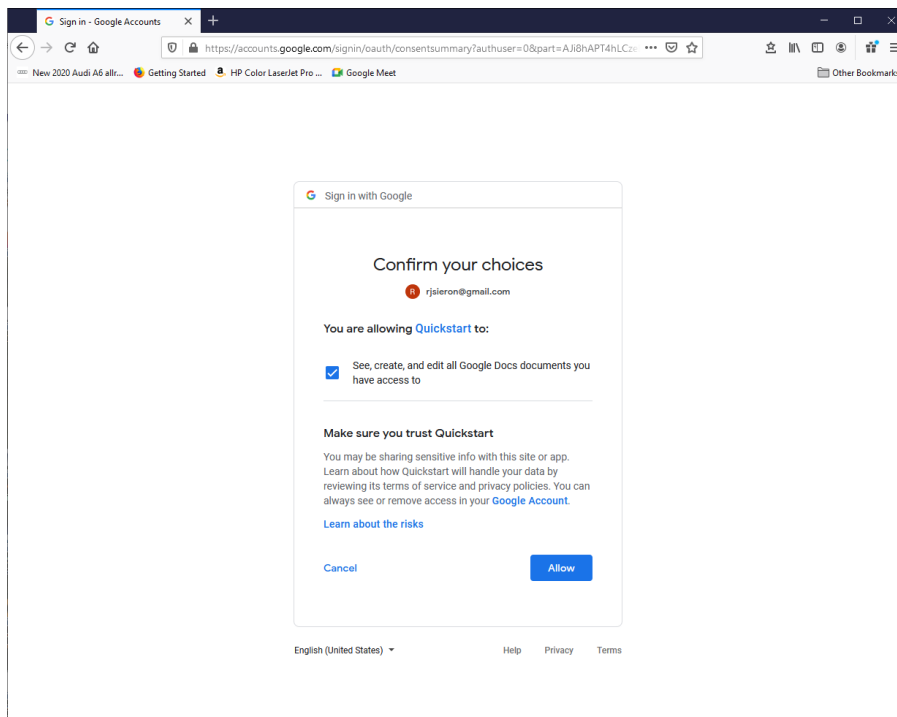Click on *Allow*. The screen shown in Figure 5 will appear.

Figure 5 The fifth step of authorizing Google Docs

Click on *Allow*. The final screen of authorizing Google Docs will appear as shown in Figure 6. You can close your browser after this.
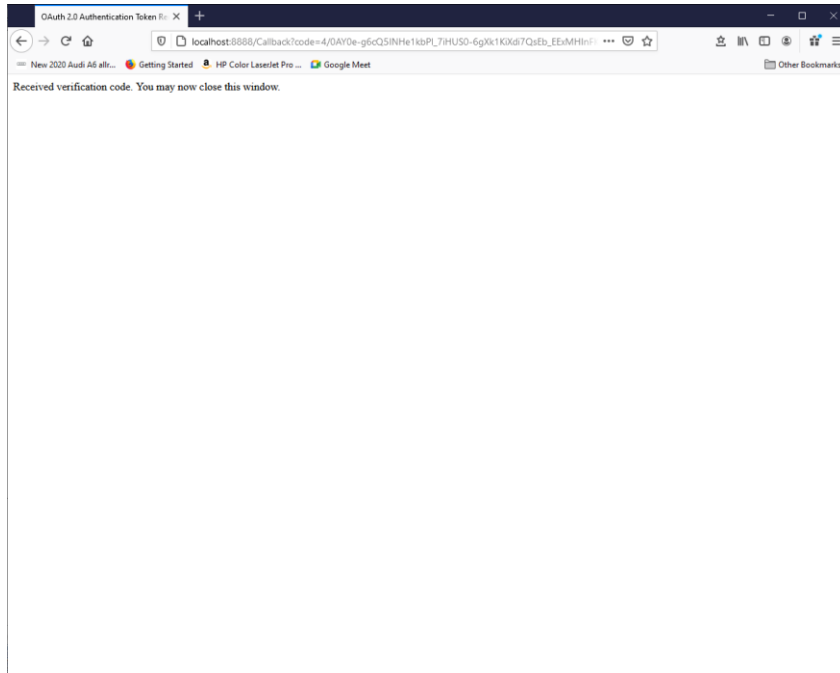

Figure 6 The sixth and final screen of authorizing Google Docs

Using BookletWriter to Enter a Booklet

Enter a booklet with BookletWriter by performing the following steps:

1. Open BookletWriter;
2. Provide the booklet file name or Google Doc id and password;
3. Enter your great ideas in the booklet fields;
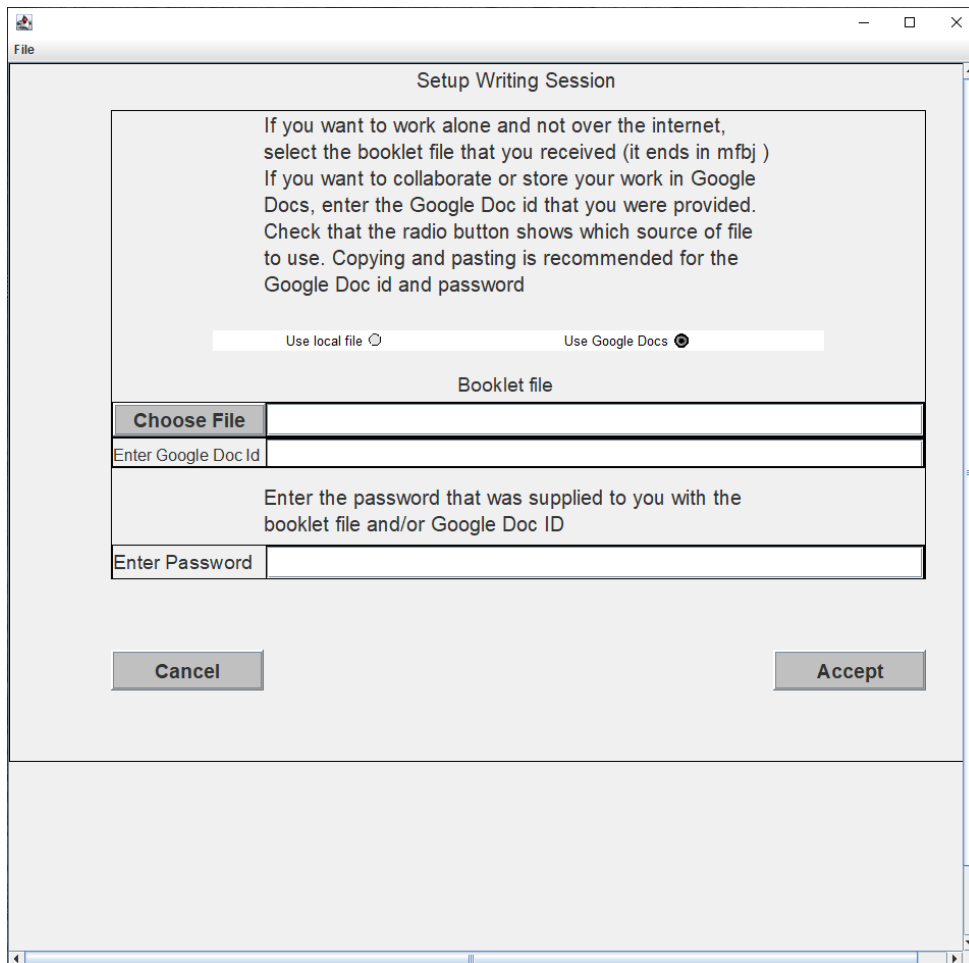4. Exit BookletWriter

Figure 7 BookletWriter startup window

Open BookletWriter

Start BookletWriter by double-clicking on the **BookletWriter11.jar.** Alternatively, you can open a terminal window and enter the command

```
java -jar BookletWriter11.jar
```

If you aren't in the same directory as **BookletWriter11.jar** you can provide the path to the file.

> NOTE: Mac users need to use BookletWriter15.jar. Apple disables capabilities in earlier versions of Java, making it impossible to write files with the Java 11 version used in BookletWriter11.jar

Another option if the BookletWriter jar file will not open is to right-click on the jar file icon, go to *Open With* and select the option referring to the JDK or JRE.

When BookletWriter starts, it will appear as shown in Figure 7.

Provide the Booklet File Name or Google Doc Id and Password

You should receive an empty booklet file and needed information in an email. The information should look something like what is shown in

```
Booklet for team J2 is named test1J2.mfbj

GoogleDocs id is (copy and paste this into the booklet writing
application) : 12upl2aSQxh1V1Aof8wqT_ENAstk84A5kcVrjLTyE9U

The password for the booklet is JC$A5<BK
```

The form shown in Figure 7 is used to enter the information.

Use the booklet file if you want to work by yourself offline. Save the booklet file to your computer, then select it by clicking on the **Choose File** button. This will start a file browser to let you choose the file.

If you are working collaboratively with the rest of your team, copy and paste the long GoogleDocs id from the email to field next to the **Enter Google Docs Id** prompt. In the example above,

```
12upl2aSQxh1V1Aof8wqT_ENAstk84A5kcVrjLTyE9U
```

is the Google Docs Id. It is 48 characters long.

Whether you are working online or offline, you must enter the password into the password field. Copying and pasting is a good idea. In the example above, the password is

```
JC$A5<BK
```

The password may contain strange characters, but it will always be 8 characters long and never contains a space.

Click the **Accept** button. The form should disappear and the form shown in Figure 8 should appear. If not, double-check that all of the information was entered correctly. It is easy to miss a character when copying and pasting.

If the entries are valid and you still cannot access it, contact your coach.

Figure 8 The first page of an empty booklet.

Enter Your Great Ideas in the Booklet

DO NOT EDIT YOUR BOOKLET USING THE GOOGLE DOCS WEB PAGE. IT WILL MAKE YOUR BOOKLET UNUSABLE!

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As shown in Figure 8, BookletWriter is laid out much like the paper booklets. Each page of the booklet can be accessed by clicking on the desired tab.

If you are working offline, click into each field and type your ideas.

If you are working online, every time you click into a field the cursor will turn into the wait cursor and there will be a slight delay while BookletWriter does the following:

- Checks to see if someone else is currently typing into the field;
- Updates your copy with anything that has been entered by others since the last time you clicked in a field;
- Changes the color of the field to green if it is ok for you to type or red if someone else is typing in the field. If you type into a red field, you are likely to lose what you entered in that field.

Wait cursors vary from system to system. On my Windows 10 laptop it is an arrow going around in a circle. On my Windows 10 desktop it is an hourglass.

Don't be concerned if the first time you click in a field it takes a while. It is doing extra work the first time. After that it will go more quickly.

Most fields require moving the mouse and clicking to start using a field. The exception is the grid in Step 5. Once you click in a part of the grid, you can use the TAB key to move between fields of the grid. There is no delay when moving between fields in the grid.

> NOTE: You don't get a continuous update of other people's work, this would cause delays while you are typing. The update only occurs when you change fields. If you want to force an update, click in another field.

All of the fields other than those in the grid have a character limit. The count of characters remaining can be seen in the upper right of the field. The color of the remaining characters field is green until ¾ of the characters have been used, then it turns yellow. When just a few characters remain, it turns red. When the limit is exceeded a pop-up message appears and no more characters can be entered in the field. You can go back and delete characters to make room for the latest thought.

Lines will automatically wrap, so it should only be necessary to use the Enter key when you want to force a new line.

Protection Against Unexpected Problems
If something major goes wrong, such as you lose your internet connection, BookletWriter is designed to let you recover and keep working.

Every 10 minutes BookletWriter makes a backup of your document and outputs printable pages. BookletWriter creates a folder (aka directory) named MiFPS under your login directory. Each time it makes a backup, it creates a folder under MiFPS named for the month, day, hour and minute. This folder contains a copy of the document that can be used for offline booklet writing and printable images of each page at that time.

You can also create a backup directory using the *Backup Files* menu entry in the Files menu.

To use the backup file, restart BookletWriter and select the *.mfbj* file in the latest backup using the **Choose File** option on the first screen. You will need to coordinate with your team to decide who is going to take which fields. Under these adverse circumstances, it will be necessary for each team member to submit their results so that the evaluators can see everyone's work.

Exit BookletWriter

You can use either the close button on the window or the **Exit** option in the Files menu. BookletWriter automatically creates a final backup folder when you exit the program.   If everyone on the team waits to exit until the booklet is complete and clicks in a field before exiting, each team member should have a complete set of results. If team members exit before other members have finished their entries, the last team member to exit will have the complete results.

Sending the Booklet Back for Evaluation

To simplify handling of booklets for state bowl, each team will send the last backup directory to their coach for submission. This is best done by zipping, compressing, etc. the last backup folder in the MiFPS directory under your login directory.

If problems such as loss of internet access make it impossible for any team member to have a booklet with all of the team member's entries, return each member's booklet to the coach.

NOTE: do not delete the folder under MiFPS named Tokens. If this folder is deleted it will be necessary to repeat the steps to authorize the use of BookletWriter with Google Docs.