

**Indyhike.org Website Documentation**  
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**The Website**

The website is indyhike.org. It is hosted by an internet company called ICDSOFT. The Indianapolis Hiking Club has business account which includes the registration of the domain name (indyhike.org), 100 GB of storage and access to the MySQL database management system.

The core of this website is a collection of CGI scripts written in the scripting language called Perl. The purpose of this document is to describe these scripts grouped together into the various tasks they perform.

**Mileage Entry:** *mileageEntry.cgi*

Hike leaders have those members who are participating in a hike enter their names on a sign-in sheet before the hike starts. The hike leader indicates on the sheet the planned mileage to be covered on the hike. The hike leader later uses *mileageEntry.cgi* to enter the mileage for each hiker.

To find the hike in question <http://indyhike.org/cgi-bin/mileageEntry.cgi?mode=calendar> is used to bring up a calendar of the months listed for the current fiscal year. For example, this is the listing for the month of April, 2023:

April 2023						
Su	Mo	Tu	We	Th	Fr	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

Each of the days in the month is a hyperlink. For example, the link for April 20 is <http://indyhike.org/cgi-bin/mileageEntry.cgi?mode=hikesearch&date=2023-04-20>

This link generates:

[Finish/Select a different hike](#)

Choose the Hike		
<a href="#">4472</a>	SMOKY MOUNTAINS - (MORNING EASY) - DAY 3	2023-04-20
<a href="#">4473</a>	SMOKY MOUNTAINS - (MORNING MODERATE) - DAY 3	2023-04-20
<a href="#">4474</a>	SMOKY MOUNTAINS - (CHALLENGING FULL-DAY) - DAY 3	2023-04-20
<a href="#">4475</a>	SMOKY MOUNTAINS - (MODERATE PACED FULL-DAY) - DAY 3	2023-04-20
<a href="#">4476</a>	THE OTHER THURSDAY MORNING HIKE	2023-04-20
<a href="#">4477</a>	EASY AT EAGLE CREEK - FIVE MILE	2023-04-20
<a href="#">4478</a>	EASY AT EAGLE CREEK - FOUR MILE	2023-04-20
<a href="#">4479</a>	EASY AT EAGLE CREEK - THREE MILE	2023-04-20
<a href="#">4480</a>	SMOKY MOUNTAINS - (AFTERNOON EASY) - DAY 3	2023-04-20
<a href="#">4481</a>	FORT HARRISON/LAWRENCE	2023-04-20

If the hike leader selects hike #4476, the following is generated:

[Finish/Select a different hike](#)

Hike	Hike Name	Day	Time	Date	Leader ID	Leader	Members	Cancelled?
#4476	THE OTHER THURSDAY MORNING HIKE	Thu	09:00	2023-04-20	#52	Tish Brafford	7	N

**Members**

Last Name

---

**Total Members: 7**

ID	Name	Miles	Delete	Leader
52	Tish Brafford	6	<a href="#">Delete</a>	Hike Leader
1643	Betty Johnson	6	<a href="#">Delete</a>	<a href="#">Make Leader</a>
725	Allan Roberts	7	<a href="#">Delete</a>	<a href="#">Make Leader</a>
1486	Kathleen Widland	7	<a href="#">Delete</a>	<a href="#">Make Leader</a>
337	Rick Kinnaman	6	<a href="#">Delete</a>	<a href="#">Make Leader</a>
1648	Curt Hawhee	6	<a href="#">Delete</a>	<a href="#">Make Leader</a>
661	Steve Nezovich	3	<a href="#">Delete</a>	<a href="#">Make Leader</a>

The information that is displayed has been retrieved the current HikeDetail, Members, and Miles tables for the current fiscal year. The text box above “Send a comment to the Mileage Officer” allows the person entering the data to make a comment about something irregular about the hike. The default hike leader is pulled from the what was originally listed in the schedule. If necessary, the hike leader can designate someone else if there was a substitute leader.

The box under “Last Name” is used to add each hiker that participated in the hike. If the hiker’s last name is “Wright” clicking on “Search” launches a screen with every member whose last name is “Wright”. Clicking on the Hiker ID “591” produces a screen where the number of miles for that hiker can be entered.

[Finish/Select a different hike](#)

ID	Name
<a href="#">591</a>	Ed Wright
<a href="#">592</a>	Elaine Wright
<a href="#">593</a>	Linda Wright

[Finish/Select a different hike](#)

Hike #4476 THE OTHER THURSDAY MORNING HIKE  
 Date 2023-04-20  
 Hiker # 591 Ed Wright  
 Miles:

Once the “Add Record” is selected, the original hike summary screen appears with that hiker added. If it was a mistake to add that hiker, the “Delete” link for that person will be removed from the screen and the database tables. The “Finish/Select a different hike” link will end the session for that hike. The coding for this CGI script is necessarily complicated because of all the procedures that are involved.

To identify which database tables that are used, it is first necessary to determine the fiscal year. This is done by calling `&getFiscalYear` which is in the `utilities.pl` file. The value is assigned to the `$FISCALYEAR` global variable. Once the fiscal year has been determined, the global variable names for the three database tables constructed. If the fiscal year is “2023”, the table names will be “HikeDetail2023”, “Miles2023”, and “Members2023”.

The `mileageEntry.cgi` script calls itself recursively each time one of the links or buttons on the screen is clicked. The invocation contains instructions on which activity is to be performed along with all the data that has to be used. Examples are:

```
“...mode=hikesearch&date=2023-04-20”
```

```
“...mode=entry&hikeid=4476&date=2023-04-20”
```

```
“...mode=addhiker&memberid=591&hikeid=4476&hikerclass=member&date=2023-04-20”
```

The script interprets what is received via case statements in `sub main`.

The calendar displays are created through use of a Perl module called “Calendar.pm”. The subroutine “PrintCalendarx” loops through each of the months found in the current fiscal year’s hike detail table.

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**Mileage Lookup:** *getMiles.cgi*

This app makes it possible to look up the hiking record for any member of the club. Entering <http://www.indyhike.org/cgi-bin/getMiles.cgi> in the web browser will bring up a form to enter a member's last name:



If the name, "Wright", is entered, it will bring up a list every member in the club who has that last name.

Member ID	Member Name
<a href="#">591</a>	Ed Wright
<a href="#">592</a>	Elaine Wright
<a href="#">593</a>	Linda Wright

It is not necessary to enter the full name to do a search. For example, "wri" would get the same result. This type of search is enabled in the script with the SQL search string:

```
"select MemberID, FirstName, LastName from $MEMBERSTABLE  
where LastName like '%$LASTNAME%'";
```

The MemberID link is the critical element in the table of names produced by the search. Every member of the club has a unique ID number. Clicking on a MemberID in the search results list displays two tables for that member. The first table displays total miles hiked in all prior years, miles hiked to date in the current year, the grand total of miles hiked to date, and the number of hikes taken in the current year. The second table lists hikes taken to date in the current year, showing the number of miles for each hike, and a running count of hikes led by the member in the current year.

## Ed Wright

Total lifetime miles as of Sep 30, 2022	24620
This year's miles since Oct 1	537
Total lifetime miles to date	25157
Number of hikes since Oct 1	118

Hike ID	Hike Date	Hike Name	Miles	Hikes Led
3217	2022-10-04	CENTRAL PARK/MONON TRAIL IN CARMEL	5	
3227	2022-10-05	MEADOWLARK PARK, CARMEL	5	1
3261	2022-10-10	CROWN HILL CEMETERY	5	2
3333	2022-10-20	EASY AT EAGLE CREEK - THREE MILE	4	3
3349	2022-10-23	AROUND LAKE MAXINHALL	6	
3353	2022-10-24	BROAD RIPPLE PARK AND BEYOND	5	4
3357	2022-10-25	CENTRAL PARK/MONON TRAIL IN CARMEL	5	
3366	2022-10-26	MEADOWLARK PARK, CARMEL	5	5
3377	2022-10-27	EASY AT EAGLE CREEK - THREE MILE	3	6
3398	2022-10-31	POTTERS BRIDGE IN NOBLESVILLE	4	7
3411	2022-11-02	MEADOWLARK PARK, CARMEL	5	8
3423	2022-11-03	EASY AT EAGLE CREEK - THREE MILE	3	9
3442	2022-11-07	TOWPATH, BUTLER UNIVERSITY AND ROCKY RIPPLE	5	
3451	2022-11-08	VETERAN'S DAY HIKE, A FEW DAYS EARLY	5	
3454	2022-11-09	MEADOWLARK PARK, CARMEL	5	10
3466	2022-11-10	EASY AT EAGLE CREEK - THREE MILE	3	11
3480	2022-11-12	ROYAL PINES	7	12

The subroutine that names the database tables that will be used is *setTables*:

```
sub setTables
{
    $FISCALYEAR = &getFiscalYear;
    $DETAILTABLE = "HikeDetail" . "$FISCALYEAR";
    $MEMBERSTABLE = "Members" . "$FISCALYEAR";
    $MILESTABLE = "Mileage" . "$FISCALYEAR";
}
```

The fiscal year is set by a routine in *utilities.pl* and the tables that are accessed are *HikeDetail*, *Members*, and *Mileage* for the current fiscal year.

The list of possible hikers that match the search criteria is handled by the *searchName* subroutine. The SQL string used to search for the matches is

```
select MemberID, FirstName, LastName from $MEMBERSTABLE
where LastName like '%$LASTNAME%'
```

The “*like '%\$LASTNAME%'*” phrase basically causes a search for any last name in the table that **contains** the partial string and ignores case considerations. The SQL search returns an array of all the matches. The subroutine then works through that array to identify which members allow their data to be published based on flags in the Members table.

The subroutine then produces a list of those members who allow their mileage data to be published. It retrieves and prints the MemberID, the FirstName, and LastName of each member that met the search parameters. The MemberID is presented as a link to each hiker’s record.

When the user clicks on the MemberID link, the script calls itself recursively to produce a new screen that presents the full record of that particular member’s hiking history.

A call to *searchByID* retrieves the first name and last name of the hiker associated with the MemberID.

Then a call to *printTotals* with the members ID performs a number tasks. It gathers the information for the summary box for the hiker and then builds an array of individual hikes the person did so far in the fiscal year. Once this information is gathered, it is passed to the *printHikerRecord* subroutine where the summary box and the list of individual hikes are printed to the screen.

**Building a Schedule** *buildSchedule.cgi*

To build a new schedule for the next two months in the fiscal year, the user is presented with the following options:



The first thing that the user has to do is make sure the starting month of two month schedule is set correctly. In the above graphic, the starting month is set for June which is the 6<sup>th</sup> month of the year. The new schedule will be for June and July of the current fiscal year. If that is not correct, clicking on *Change starting month* will allow the user to make the change.

The process of building a new schedule makes use of a table called NewSchedule. This table should be completely empty of any records when starting a new schedule. The table is normally cleared out when the data for the previous two months has been loaded into the HikeDetail table for the current fiscal year.

Once this table is available, the user can start adding hikes to it using the *Create a New Hike* and *Create a Hike from a Recurring Template*.

Clicking on *Create a New Hike* will produce the following form:

Create a new hike listing	
Hike ID	<input type="text"/>
Hike Name	<input type="text"/>
Description	<input type="text"/>
<input type="button" value="Continue"/>	

The initial step is to enter the name of the hike and a description:

Create a new hike listing	
Hike ID	
Hike Name	Test Hike A
Description	This is an example of how to create a hike listing in building a new schedule.
<input type="button" value="Continue"/>	

When you press the “Continue” button, you get:

<b>HikeID</b>	230
<a href="#">HikeName</a>	TEST HIKE A
<b>Day</b>	
<a href="#">Date</a>	
<a href="#">Time</a>	12:00 AM
<a href="#">LeaderName</a>	
<b>LeaderID</b>	0
<a href="#">Description</a>	This is an example of how to create a hike listing in building a new schedule.
<a href="#">Delete Hike</a>   <a href="#">Reuse Hike</a>	

At this point the app has added a record into the NewSchedule table and has assigned the *HikeID* to be 230. It has filled out the *HikeName* field with “TEST HIKE A” as the name of the hike and filled out the *Description* with “This is an example of how to create a hike listing in building a new schedule.”. The *Time* field has defaulted to “12:00 AM” but must be changed later. The *LeaderID* field has defaulted to “0” but will change to a real value once the *LeaderName* has been entered.

The value, 230, because there have been 229 entries before that. It is the locator number for this record. If you were to delete this record, it will not be used again.

Notice that the various fields in the first column are links to entering or editing those fields in the record. The *Day* field cannot be edited. It is filled in automatically by entering the date. Similarly, the *LeadeID* value will be filled in once the *LeaderName* value has been entered. If click on a field that

already has information entered for it, clicking on it again will allow you to edit the value. Here are some subsequent screens of values being entered.

**Date**

<b>HikeID</b>	230
<a href="#">HikeName</a>	TEST HIKE A
<b>Day</b>	Sat
<a href="#">Date</a>	Saturday, August 26
<a href="#">Time</a>	9:00 AM
<a href="#">LeaderName</a>	
<b>LeaderID</b>	0
<a href="#">Description</a>	This is an example of how to create a hike listing in building a new schedule.
<a href="#">Delete Hike</a>   <a href="#">Reuse Hike</a>	

**Time**

<b>HikeID</b>	230
<a href="#">HikeName</a>	TEST HIKE A
<b>Day</b>	Sat
<a href="#">Date</a>	Saturday, August 26
<a href="#">Time</a>	9:00 AM
<a href="#">LeaderName</a>	Ed Wright
<b>LeaderID</b>	591
<a href="#">Description</a>	This is an example of how to create a hike listing in building a new schedule.
<a href="#">Delete Hike</a>   <a href="#">Reuse Hike</a>	

Note that you can always delete the hike entry.

If you choose to select *View All Hikes*, you will get a listing of all the hikes in the *NewSchedule* table in chronological order. For each hike listing, the HikeID value is linked to a screen where you can edit the contents.

## Recurring Hike Templates

An associated database table that assists in building a schedule is *HikeDesc*. This table exists independently of any fiscal year. It contains essential information for various hikes that recur regularly in the schedule. The pertinent fields in this table are:

*Day of Week, Time, Hike Name, Leader ID, Leader Name, Description*

When you wish to enter a particular recurring hike, click on *create a Hike from a Recurring Template*. You will get the following screen:

If you enter “Eagle Creek”, it will search for all templates that have “Eagle Creek” in their hike name field. For example:

<a href="#">43</a>	Thu	09:30	EASY AT EAGLE CREEK - FOUR MILE	802	Harold Crooks	Same directions and repeat dates as Easy at Eagle Creek - Five Mile. This is a 4 mile modest paced hike mostly on groomed trails with some hills. Same lunch invite as the 5 mile hike. (M,NS,2.5-3) Leader: Harold Crooks (317-730-4850)
<a href="#">41</a>	Thu	09:30	EASY AT EAGLE CREEK - THREE MILE	591	Ed Wright	Same directions and repeat dates Easy at Eagle Creek - Five Mile. This is a 3-4 mile hike at a modest pace, mostly groomed flat trails and paved roads. Same lunch invite as the 5 mile hike. (M,PS/NS,2.5-3) Leader: Ed Wright (317-445-5646)
<a href="#">181</a>		09:30	EASY AT EAGLE CREEK - THREE MILE	591	Ed Wright	Same directions and repeat dates Easy at Eagle Creek - Five Mile. This is a 3 mile hike at an even slower pace, mostly on paved roads. (F,PS/NS,2.5-3) Leader: Ed Wright (317-445-5646)
This is the first of three very popular hikes in Eagle Creek Park every Thursday morning. All three hikes meet at the Earth Discovery Center parking lot in Eagle Creek Park (fee), which is located off of						

If you click AutoKey link 41, you will get:

Change the values of a recurring hike	
<b>Autokey</b>	41
<b>HikeName</b>	EASY AT EAGLE CREEK - THREE MILE
<b>Description</b>	Same directions and repeat dates Easy at Eagle Creek - Five Mile. This is a 3-4 mile hike at a modest pace, mostly groomed flat trails and paved roads. Same lunch invite as the 5 mile hike. (M,PS/NS,2.5-3) Leader: Ed Wright (317-445-5646)
<b>LeaderName</b>	Ed Wright
<b>LeaderID</b>	591
<b>Tm</b>	09:30
<b>Day</b>	Thu
<a href="#">Delete this recurring hike</a>	

Of course you can make changes to the various fields in that hike listing. This will not change any values in the hike template.

Below that hike listing, you can enter the date of the hike or even choose whether it repeats on a certain day of the week during that two months.

**Insert Hikes on Multiple Days**

---

**Or choose a date for this hike.**

August 2023							
Su	Mo	Tu	We	Th	Fr	Sa	
		1	2	3	4	5	31
6	7	8	9	10	11	12	32
13	14	15	16	17	18	19	33

## Adding a Hike *addHike.cgi*

This script will allow a hike to the existing database table of hikes for the fiscal year. It performs exactly like the addition of a hike when building a new schedule.



The image shows a web form titled "Create a new hike listing" with a light beige background. At the top, there are two blue links: "Create a New Hike" and "Search Similar Hikes". The form itself is a rectangular box with a double-line border. Inside, the title "Create a new hike listing" is centered at the top. Below the title, there are two main input areas. The first is a single-line text box labeled "Hike Name" on the left. The second is a larger, multi-line text area labeled "Description" on the left. At the bottom center of the form, there is a button labeled "Continue".

## Membership Management *addMember.cgi*

The *addMember.cgi* script is central to adding modifying club membership records. Because of its importance to membership data, it is restricted to the few people who are permitted to see and modify these records. Granting permission to have this role is done via password access to the datasink.org control panel.

Invocation of this application is accomplished by invoking *addMember.cgi*. This brings up the following screen:



The screenshot displays a web interface with a textured, light-brown background. At the top center, the text "Membership Management" is written in a bold, black, serif font. Below this, "Members2023" is centered in a smaller, black, serif font. A horizontal line of five blue, underlined links is positioned below the text: "Add a New Member", "Edit an Existing Member", "All Members", "Paid Members", and "Active Members". Centered below these links is the text "Total Paid Members: 559". A thin horizontal line is visible at the bottom of the screenshot area.

Each of these links is self-explanatory.

**Add a New Member** produces the following screen:

Add new member to Members2019Exp		
MemberID	1893	
MemberName	<input type="text"/>	Last name, First name
Last Name	<input type="text"/>	Last name
First Name	<input type="text"/>	First name
Print Name	<input type="text"/>	First name Last name
Active	0 Not Active ▾	Currently active 1=yes, 0=no
Paid	0 Unpaid ▾	Dues 1=paid, 0=not paid
MailTo	1 Print label ▾	1=Print label; 0=Do not print label
MailToName	<input type="text"/>	Lastname, Firstname of individual; combine names for family members
Address	<input type="text"/>	Street address
City	<input type="text"/>	City
State	<input type="text"/>	State
Zip	<input type="text"/>	Use USPS standard format for abbreviations, no punctuation
Phone	<input type="text"/>	Telephone number
email	<input type="text"/>	Email address
Reinstated	0 Not reinstated ▾	Reinstated after absence: 1=yes, 0=no
YRJoinedLatest	<input type="text"/>	Most recent year joined after absence
YRJoinedOrig	<input type="text"/>	Year when originally joined
YRSoff	<input type="text"/>	The number of years inactive
AccumYRSCurrent	1 <input type="text"/>	Defaults to 1; can be edited
YR25Award	0 Has not received YR25Award ▾	Received 25 years award. 1=yes, 0=no
AccumMilesOct1	<input type="text"/>	Supplied by other software
MilesYTD	<input type="text"/>	Supplied by other software
TotMiles	<input type="text"/>	Supplied by other software
Latest Mileage Award	<input type="text"/>	Latest mileage award
NoBadge	0 Receives badge ▾	Chose not to receive mileage badge. 1=yes, 0=no
Milestone	0 Has not received Milestone Award ▾	Has received 10,000 mi. award. 1=yes, 0=no
Publish	1 Publish information ▾	Publish information? 1=yes, 0=no
Web	1 Gets schedule online ▾	Get schedule online. 1=yes, 0=no (mailed printed copy)
Comments2	<input type="text"/>	Additional Comments
<input type="button" value="Add Member"/> <input type="button" value="Delete"/>		

**EditAnExistingMember** produces a fill-in form to enter some portion of the surname of the hiker whose record is to be edited:

**Enter a last name to search for:**

Last name

This produces a current list of data for that member:

MemberID	591
MemberName	Wright, Ed
LastName	Wright
FirstName	Ed
PrintName	Ed Wright
Active	1
Paid	1
MailTo	1
MailToName	Wright, Ed & Linda
Address	██████████
City	Fishers
State	IN
Zip	46037
Phone	██████████
email	ewright@indyhike.org
Reinstated	0
YRJoinedLatest	2002
YRJoinedOrig	2002
YRSoff	0
AccumYRSCurrent	21
YR25Award	0
AccumMilesOct1	24620
MilesYTD	461
TotMiles	25081
Award	25000
NoBadge	0
Milestone	1
Publish	1
Web	1
Comments2	
Hikes	0

**Delete MemberID 591**

**All Members:**

This produces a list of all the members currently registered in the club, including those who have not paid their dues. Clicking on the *MemberID* will bring up their record for editing.

633 Members Listed

MemberID	MemberName
<a href="#">1871</a>	Abbenhaus, Linda
<a href="#">1</a>	Abbott, Tony
<a href="#">2</a>	Abner, Cheryl
<a href="#">3</a>	Abner, Steven
<a href="#">1512</a>	Acevedo, Janet
<a href="#">1828</a>	Adamson, Pamela
<a href="#">6</a>	Alden, Susan
<a href="#">1570</a>	Amarante, Gilda
<a href="#">1514</a>	Anderson, Neil
<a href="#">9</a>	Applegate, Joanne

**Paid Members:**

This produces a list of all the members who have paid their dues. Clicking on the *MemberID* will bring up their record for editing.

559 Paid Members

MemberID	MemberName
<a href="#">1871</a>	Abbenhaus, Linda
<a href="#">1</a>	Abbott, Tony
<a href="#">2</a>	Abner, Cheryl
<a href="#">3</a>	Abner, Steven
<a href="#">1512</a>	Acevedo, Janet
<a href="#">1828</a>	Adamson, Pamela
<a href="#">6</a>	Alden, Susan
<a href="#">1570</a>	Amarante, Gilda
<a href="#">1514</a>	Anderson, Neil
<a href="#">9</a>	Applegate, Joanne

**Active Members:**

This produces a list of all the members who have actually hiked sometime in the current fiscal year.

633 Active Members

<b>MemberID</b>	<b>MemberName</b>
<a href="#">1871</a>	Abbenhaus, Linda
<a href="#">1</a>	Abbott, Tony
<a href="#">2</a>	Abner, Cheryl
<a href="#">3</a>	Abner, Steven
<a href="#">1512</a>	Acevedo, Janet
<a href="#">1828</a>	Adamson, Pamela
<a href="#">6</a>	Alden, Susan
<a href="#">1570</a>	Amarante, Gilda