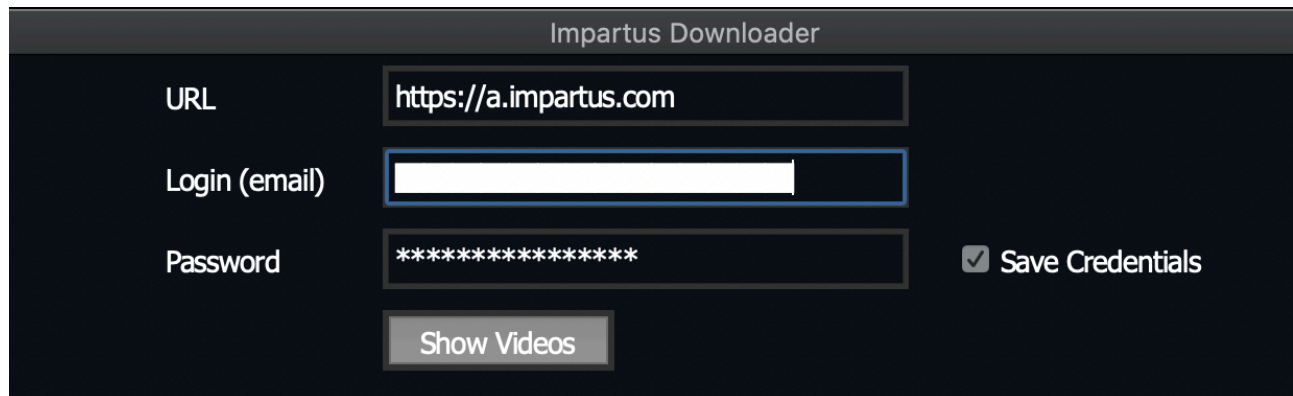


Authentication Dialog	2
URL	2
Login	2
Password	2
Save Credentials	2
Show Videos	2
Content	3
Index column	3
Editable Field(s)	3
Sort Icons	3
Download Videos	3
Pause / Resume downloads	3
Play lecture video / Open lecture folder	3
Download / View backpack slides	3
Manually attach slides	4
Toolbar buttons	4
Reload	4
Auto Organize lectures	4
Columns	4
Flipped Lecture Quality	5
UI Color Scheme	5
Configuration	5
impartus.conf	5
mappings.conf	6
color-schemes.conf	6
creds.conf	6

Authentication Dialog

The application presents an authentication dialog upon launch.

The image shows a dark-themed window titled "Impartus Downloader". It contains three input fields: "URL" with the text "https://a.impartus.com", "Login (email)" which is empty, and "Password" which contains ten asterisks. To the right of the password field is a checked checkbox labeled "Save Credentials". Below the input fields is a button labeled "Show Videos".

Impartus Downloader	
URL	https://a.impartus.com
Login (email)	
Password	***** <input checked="" type="checkbox"/> Save Credentials
<button>Show Videos</button>	

URL

Usually <https://a.impartus.com>, the URL endpoint can be changed to any other url hosted by Impartus platform.

Login

User email address for the Impartus platform.

Password

User password.

Save Credentials

When checked, the credentials (*email* and *password*) shall be stored in [etc/creds.conf](#).

The same shall be retrieved on the next application launch and pre-filled in the *authentication dialog*.

Unchecking the *Save Credentials* checkbox will revert the [etc/creds.conf](#) to it's default value, i.e. empty string for email and password.

Show Videos

Authenticates with the Impartus platform and fetches a list of lectures available to the user. The application fetches both the regular and flipped lectures, by default grouped by subjects, the most recent updated subjects listed first.

Content

Index column

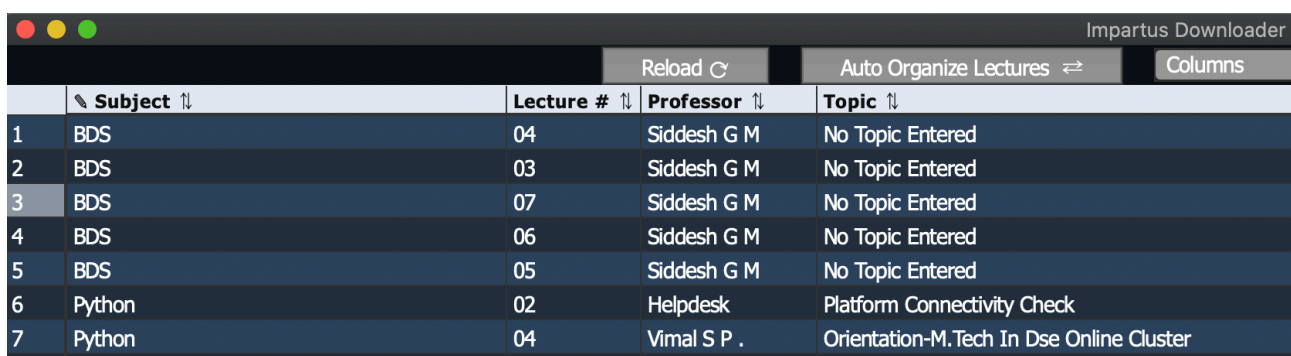
The leftmost column shows the video number.

Editable Field(s)

Subject column has editable flag set, as indicated by symbol '✎'. Clicking on a editable field lets the user update the value of the field. For the subject field this can be used to create a shorter name instead of the default long names.

Sort Icons

Clicking on a column name sorts the table, first by descending and then ascending order on a subsequent click. The unsorted icon '↕' changes to descending '▼' or ascending '▲'.



The screenshot shows the 'Impartus Downloader' application window. It features a table with columns: 'Subject' (with an edit icon), 'Lecture #', 'Professor', and 'Topic'. The table contains 7 rows of data. Above the table are buttons for 'Reload', 'Auto Organize Lectures', and 'Columns'.

	✎ Subject ↕	Lecture # ↕	Professor ↕	Topic ↕
1	BDS	04	Siddesh G M	No Topic Entered
2	BDS	03	Siddesh G M	No Topic Entered
3	BDS	07	Siddesh G M	No Topic Entered
4	BDS	06	Siddesh G M	No Topic Entered
5	BDS	05	Siddesh G M	No Topic Entered
6	Python	02	Helpdesk	Platform Connectivity Check
7	Python	04	Vimal S P .	Orientation-M.Tech In Dse Online Cluster

Download Videos

Videos that are not yet downloaded show their progress bar field empty along with a symbol '⌂'. Clicking on a video download button '↓' starts the download. Once the download starts, the download video button is changed to pause button '||'.

Pause / Resume downloads

Clicking the pause button suspends the thread which can be resumed by clicking the same button again, which is labeled with the symbol '||▶'.

Upon completing the download, the application decrypts, encodes the streams. During this time the progress bar shows the hourglass symbol '⌚'.

Play lecture video / Open lecture folder

Once the video is successfully encoded, the play video '▶' and open folder '📁' are enabled. The download video button '↓' will be disabled to prevent accidental re-download or overwriting the downloaded video.

Completed lecture downloads show up with progress bar at 100% and marked with a completed '✓' symbol.

Download / View backpack slides

If a lecture has associated backpack slides, its slides download button is enabled, clicking the slides download button '↓' downloads the backpack slide and upon download, it enables the show slide button '📄'.

Backpack slides of type *ppt*, *pptx*, *xls*, *xlsx*, *doc*, *docx*, *pdf* are supported by default configuration, all of these can be launched from the application by clicking the '📄' button.

Duration ↕	Tracks ↕	Date ↕	Downloaded? ▼	Video	Video	Folder	Slides	Slides	Slides
2:00h	1	2021-04-18	<div></div> ✓	↓	▶	⬆	↓	☰	🔗
2:00h	1	2021-04-11	<div></div> 56%	⏸	▶	⬆	↓	☰	🔗
2:00h	1	2021-05-09	<div></div> ✓	↓	▶	⬆	↓	☰	🔗
2:00h	1	2021-05-02	<div></div> ✓	↓	▶	⬆	↓	☰	🔗
2:00h	1	2021-04-25	<div></div> ✓	↓	▶	⬆	↓	☰	🔗
1:00h	2	2020-03-25	<div></div> ✓	↓	▶	⬆	↓	☰	🔗
3:05h	2	2020-03-28	<div></div> ⓧ	↓	▶	⬆	↓	☰	🔗
2:40h	2	2020-04-04	<div></div> ⓧ	↓	▶	⬆	↓	☰	🔗
2:40h	1	2020-04-19	<div></div> ⓧ	↓	▶	⬆	↓	☰	🔗
2:40h	1	2020-04-18	<div></div> ⓧ	↓	▶	⬆	↓	☰	🔗

Manually attach slides

Additionally, slides downloaded manually from other sources can be associated to a lecture by clicking the attach slides button ‘🔗’. Clicking the ‘🔗’ button opens a file chooser dialog box, where one can select one or more files of types *ppt*, *pptx*, *xls*, *xlsx*, *doc*, *docx*, *pdf*. The selected files are copied to the same folder where video lecture is saved.

Toolbar buttons

Reload

Clicking the reload button fetches the fresh content from the server. This can also be helpful if the current download is stuck due to a server issue.

Auto Organize lectures

The default configuration saves the video lectures at *wilp/<subject>/<professor-name>/<lecture-no>/<lecture-topic>-<date>.mkv*

Occasionally the lectures do have their topic updated, and the default topic returned by the server is *No Topic Entered*, which becomes a part of the video name at the time of the download.

If subsequently the topic is updated, the user would want it to be reflected the same in the video file's name.

Another case is, when the user wants to use a shorter name for the subject, instead of a longer default like *Big Data Systems (S1-20 DSECLZG522)*. By using a shorter subject name mapping, one would expect the video lectures be saved at *wilp/BDS/...* instead of *wilp/Big Data Systems (S1-20 DSECLZG522)*.

The application detects such differences in the expected and real lecture location / names, and enabled the *Auto Organise Lectures* button. Clicking the button would rename or move the lectures to their new expected path, and clean up any empty directories as a result of the movement.

Columns

The dropdown shows the list of all the available columns, one or more columns can be made invisible to provide more screen space to the content.

Flipped Lecture Quality

If the user has access to flipped lectures, the table list will also show the flipped lectures along with the regular lectures. *Flipped Lecture Quality* button is enabled in such a case.

As the flipped lectures on Impartus platform support multiple resolutions, using the Flipped lecture quality dropdown one can choose the video resolution for a flipped lecture download.

The default configuration is set to 'highest', which looks for a url with resolution *1280xHD*, followed by *800xHigh*, *600xMedium* and *400xLow* (in that order) and picks up the first such url found.

UI Color Scheme

The colored radio buttons on the extreme right let a user choose the color scheme for the UI.

Configuration

impartus.conf

target_dir

Top level directory under which all the lecture videos (and slides) will be saved.

export_variables

Some platforms (Linux) need environment variable to be set in order to launch a given application launcher.

debug

If true, shows extra debugging logs, leaves temporary files created during the video downloads / encoding.

progress_bar

Choose whether to use unicode symbols or ascii characters for progress bar display.

content_font

Font name for the application content.

header_font

Font name for table header.

content_font_size

Font size for the application content.

header_font_size

Font size for the table header.

retry_wait

Wait time in seconds before retrying a failed download.

video_quality

Video quality for the flipped lecture downloads.

video_quality_order

Support resolutions in high to low order.

slides_upload_window

Threshold in days, maps a video to a slide that is uploaded up to N days after publishing the video.

allowed_ext

List of attachment types (for both backpack slides and manually downloaded slides) that can be associated to a lecture video.

use_safe_paths

Remove special characters, sanitize file paths before saving the lecture video / slide.

video_path

File path format for lecture videos

slides_path

File path format for lecture slides.

mappings.conf

Contains a yaml format mapping for subjectName long names (at server) to short names (user specified)

color-schemes.conf

Contains yaml formatted hex colour values for various UI components, clubbed under a name like 'monochrome', 'blue' or 'purple'

Also contains a entry named 'default' set to one of the above values.

Additional colour schemes can be added to this file.

creds.conf

Contains yaml formatted configuration to save user credentials. Default values for both login_email and password are empty strings "".