

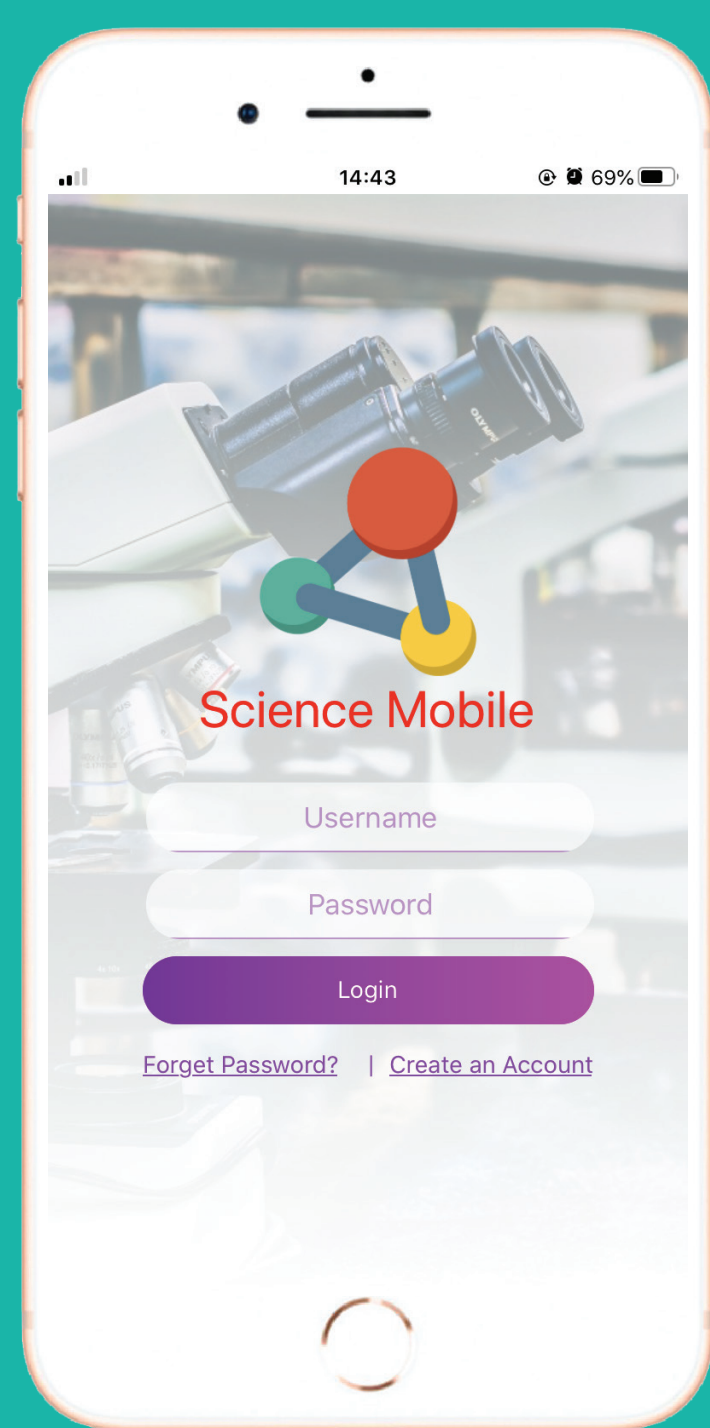
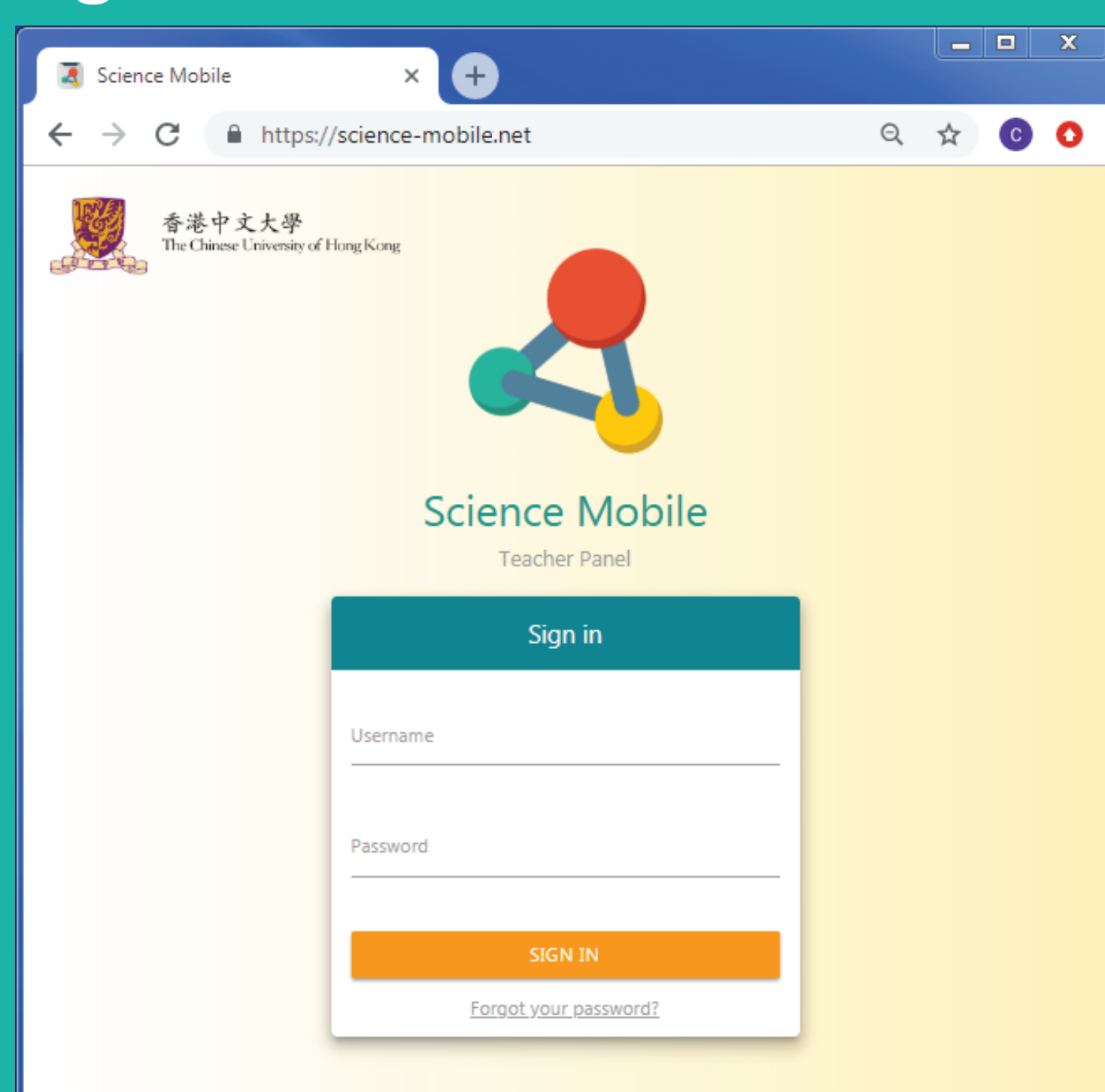
“Science Mobile” - Learning Science with a Smartphone

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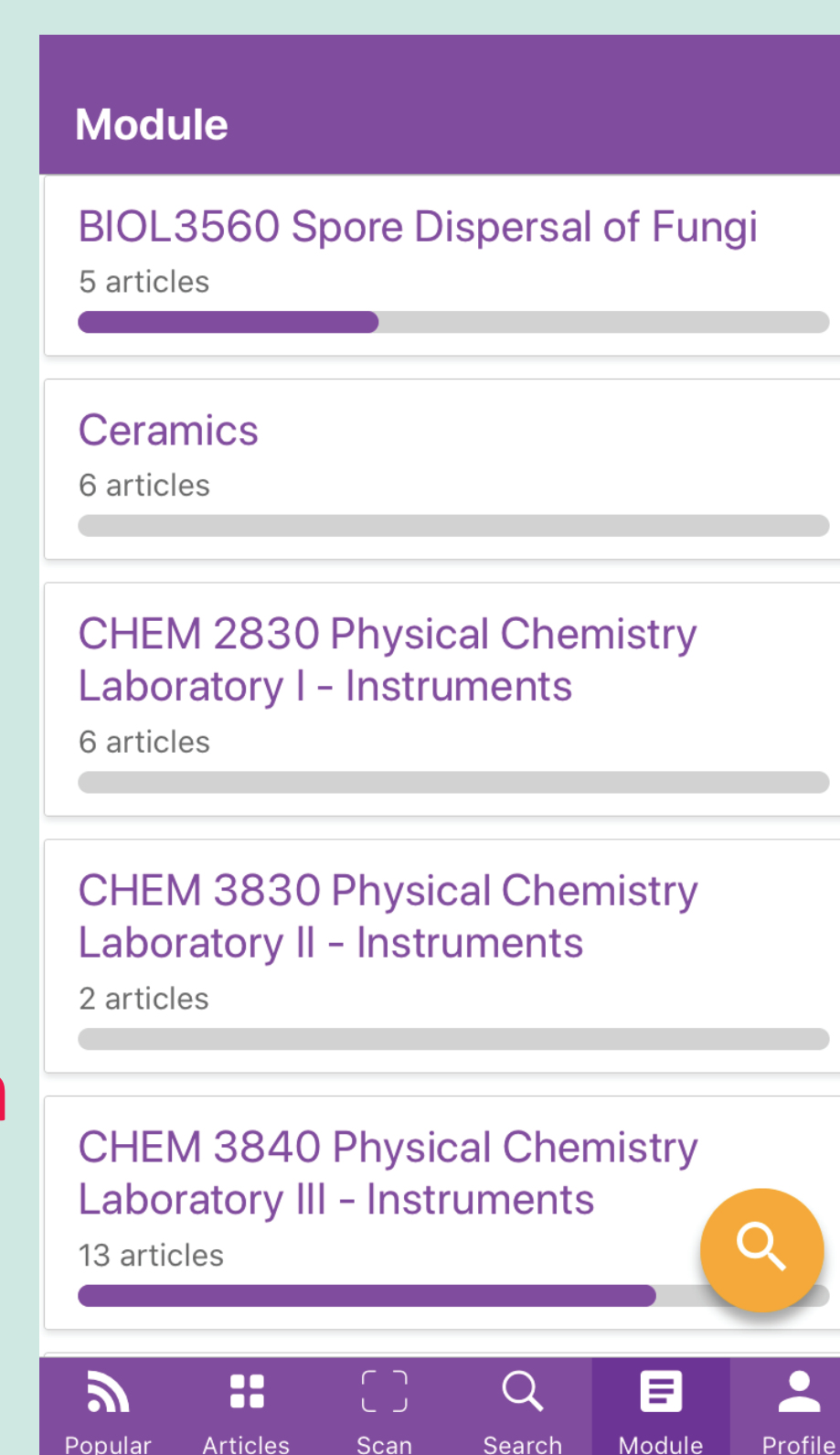
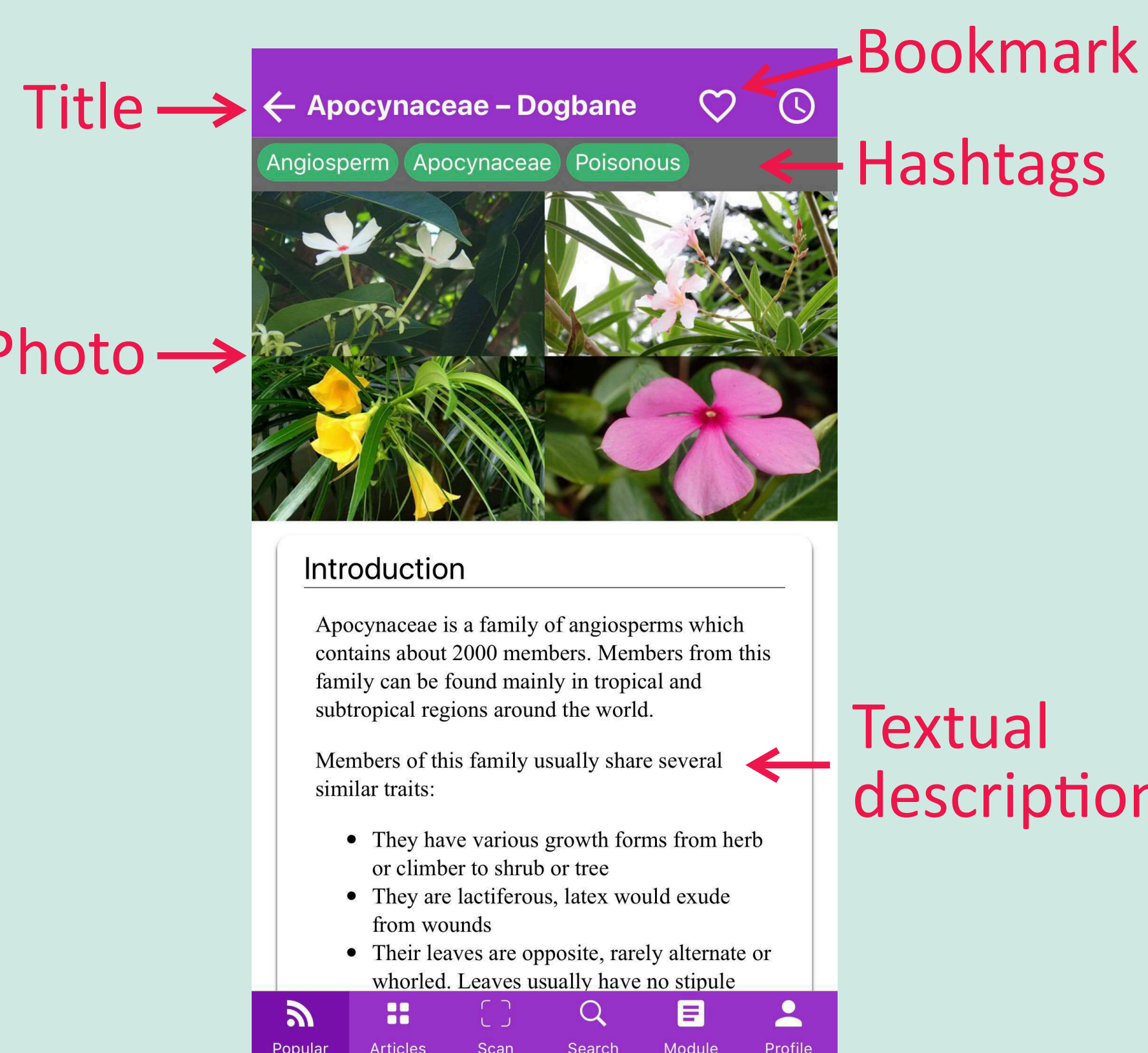
Introduction

“Science Mobile” is developed as a portable learning platform to facilitate students learning science concepts across different science disciplines in daily life. All learning objects are hosted by a web-based learning management platform. “Science Mobile” has been launched in App Store in IOS system and Google Play in Android system since April 2019. Students can install the apps into their smartphones to view the learning objects for ubiquitous learning.

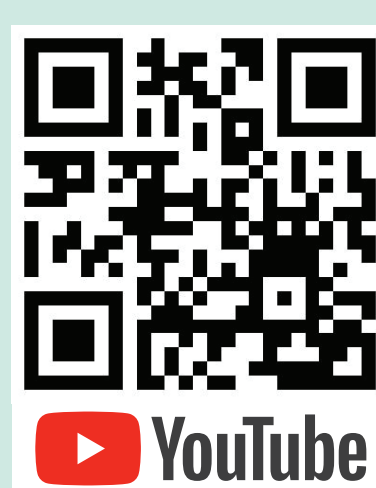


Portable learning platform - *Students*

- Students can access the learning objects by
 - ✓ scanning **barcodes**;
 - ✓ scanning **QR codes**;
 - ✓ scanning **RFID**; or
 - ✓ searching with **keywords / hashtags**.
- Content of the learning objects includes
 - ✓ textual description;
 - ✓ photos / images; and
 - ✓ videos.
- Learning objects are sorted into 6 different themes under Chemistry and Life Sciences.
- Assessments are available to test students' understanding on the topics.
- Learning modules are available to allow students explore more about the objects.



User guide



① Looking for QR codes / barcodes on the learning objects



② Scanning the QR code / barcode



③ Displaying information in the app

Summary of deliverables:

Until July 2020, the approximated number of the learning items is summarized in the following table.

	Chemistry	Life Sciences
No. of topics	598	328
Textual content	598	328
Photos / Images	975	1284
Lecture videos / Animations / Demonstration videos	221	62
Learning modules	37	15

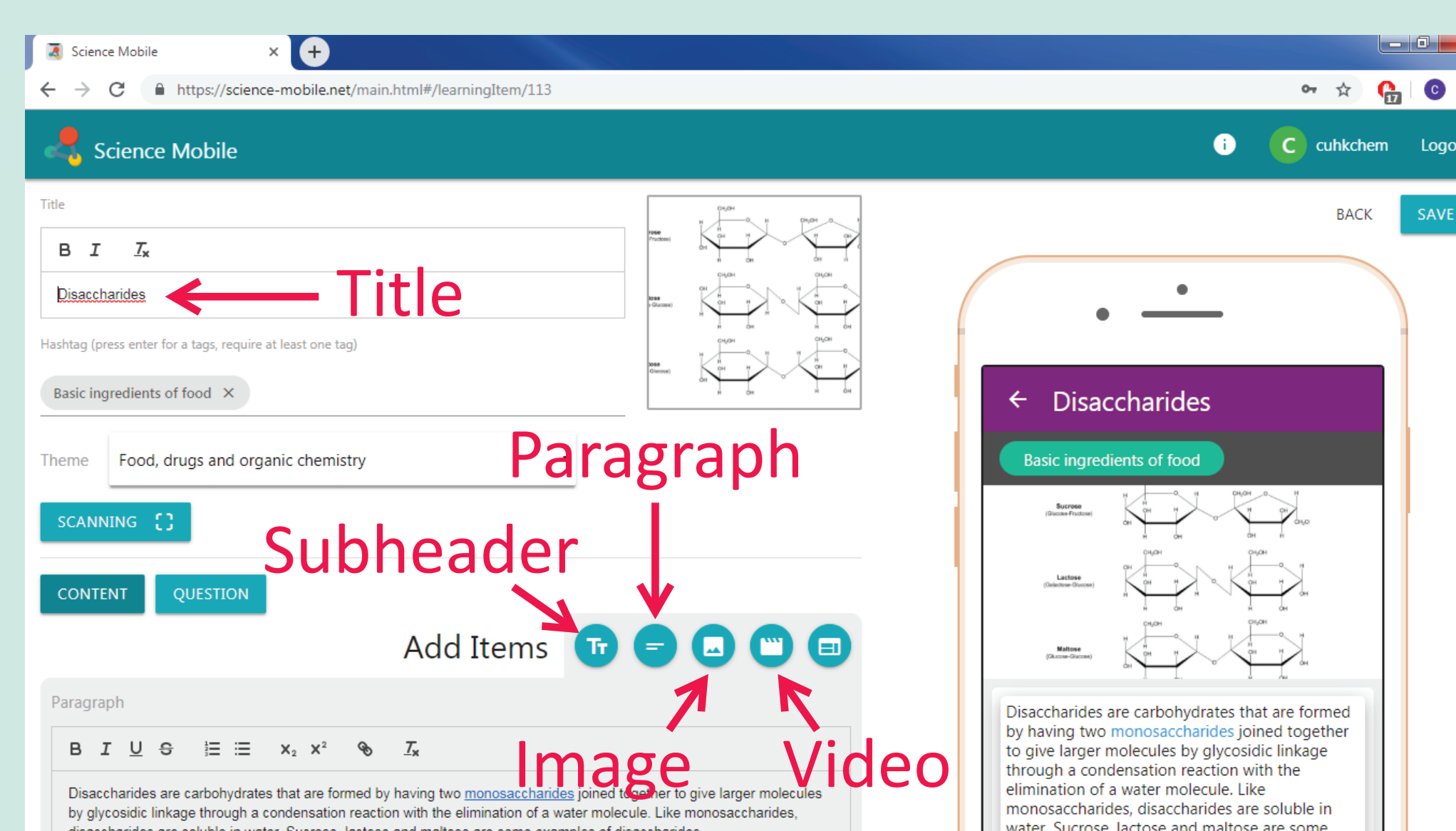
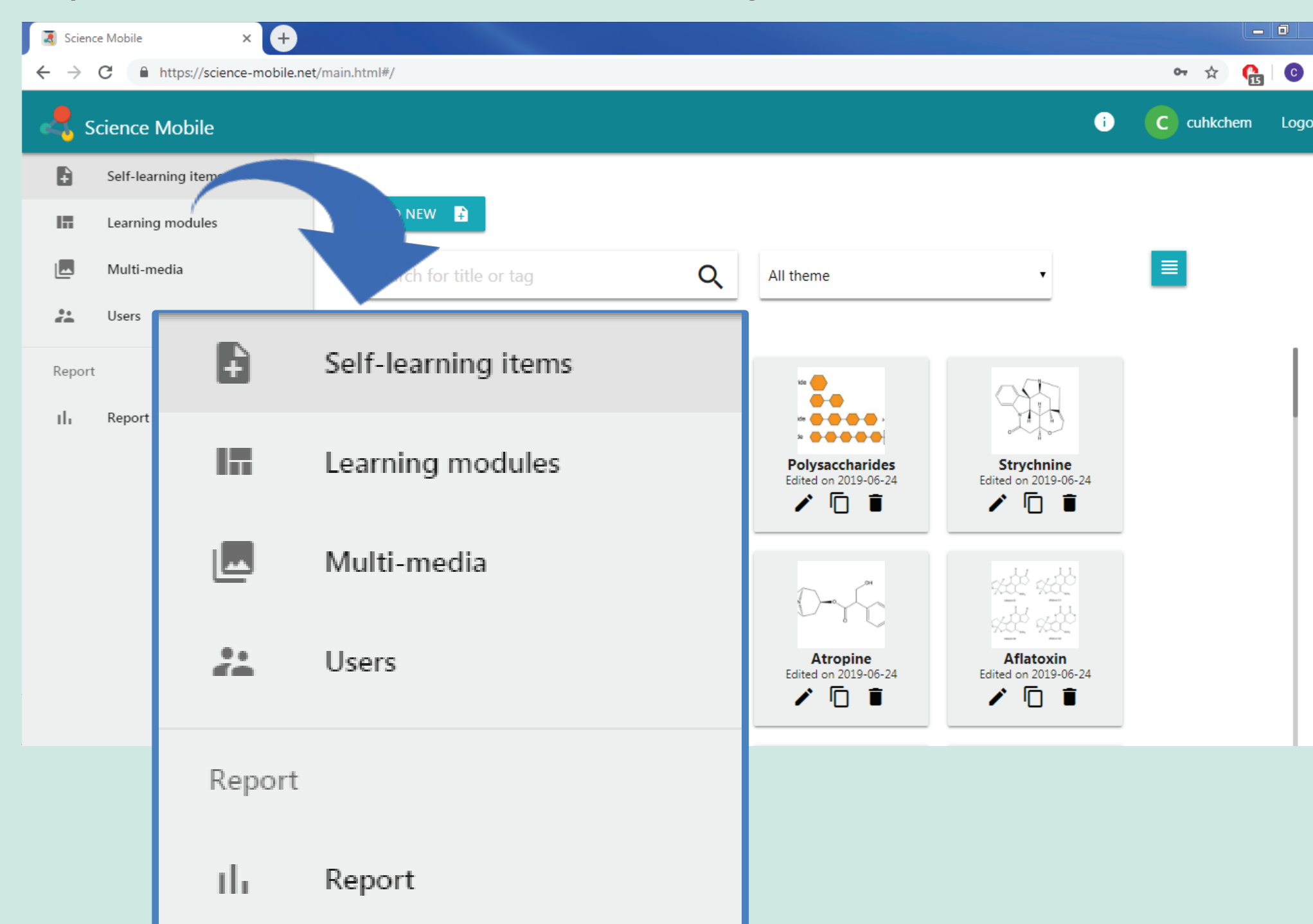
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Web-based learning management system - *Teachers*



- Teachers can upload
 - ✓ learning objects;
 - ✓ multi-media (e.g. audio, videos and photos); and
 - ✓ assessments; and
- Reports on the assessment of students can be generated to evaluate their performance.
- Learning modules can be created to allow students explore more about the objects.



To promote interactive learning, in some UGEB courses, students are invited to create learning items for the platform, with 310 topics created in 2 terms.