

Machine Reasoning and Reasoning System User Guide

Intelligent Teaching Assistant System



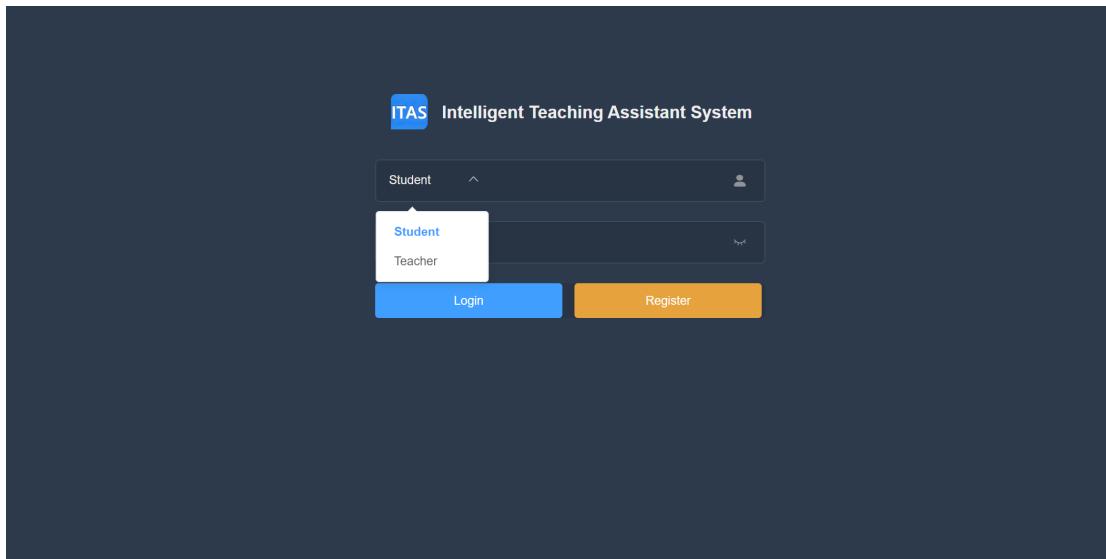
TEAM MEMBERS

A0198535N LI XINLIN

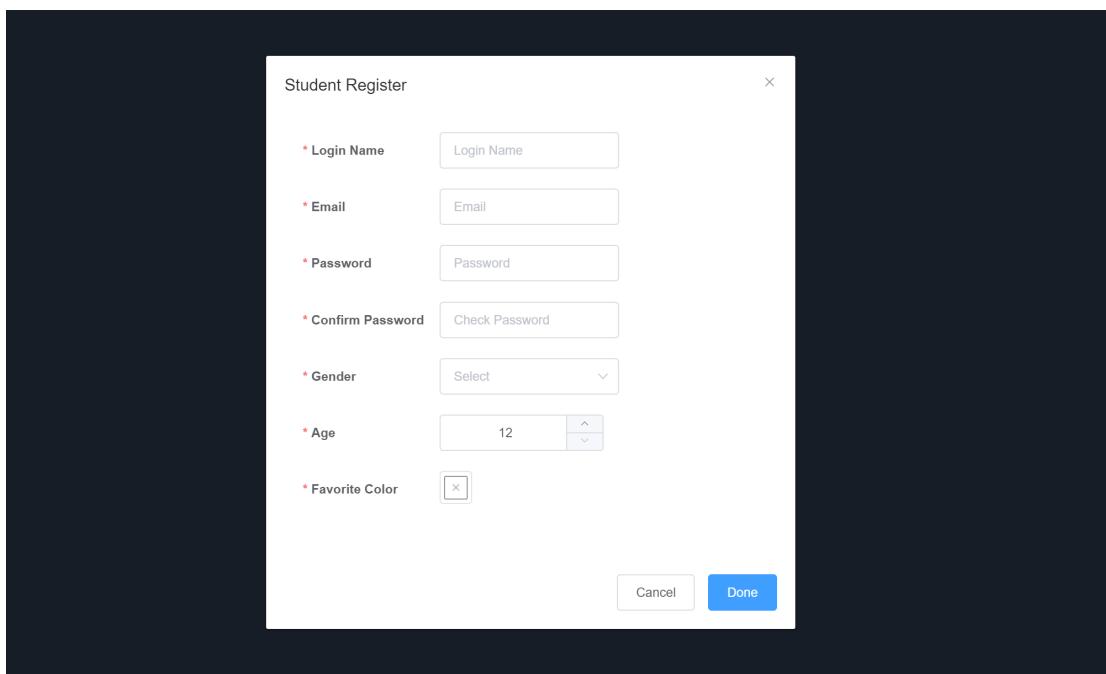
A0198491M XU JIACHEN

MASTER OF TECHNOLOGY

1. Register and log in

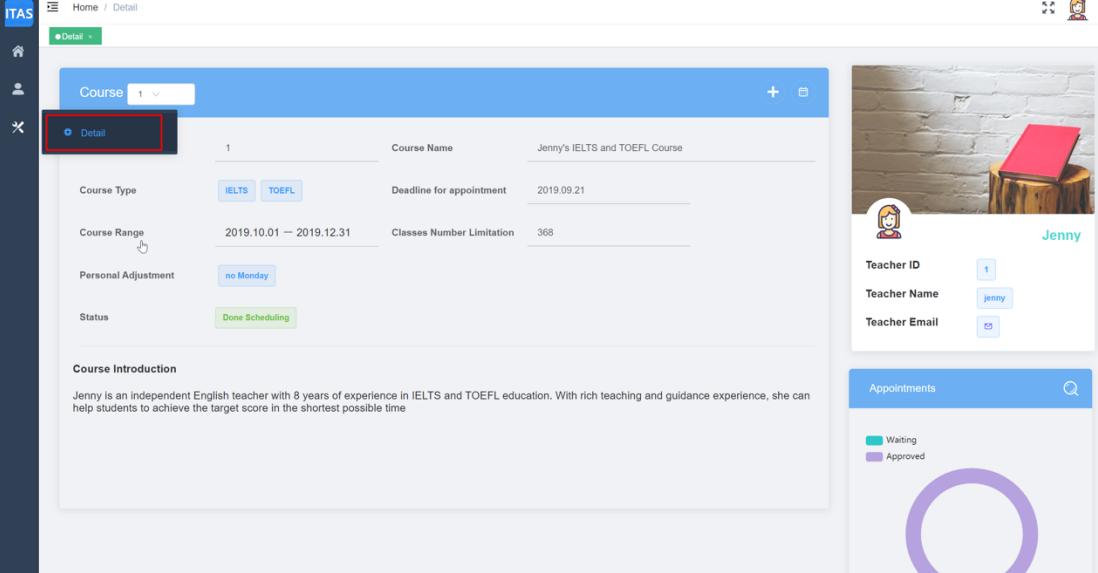


Register page



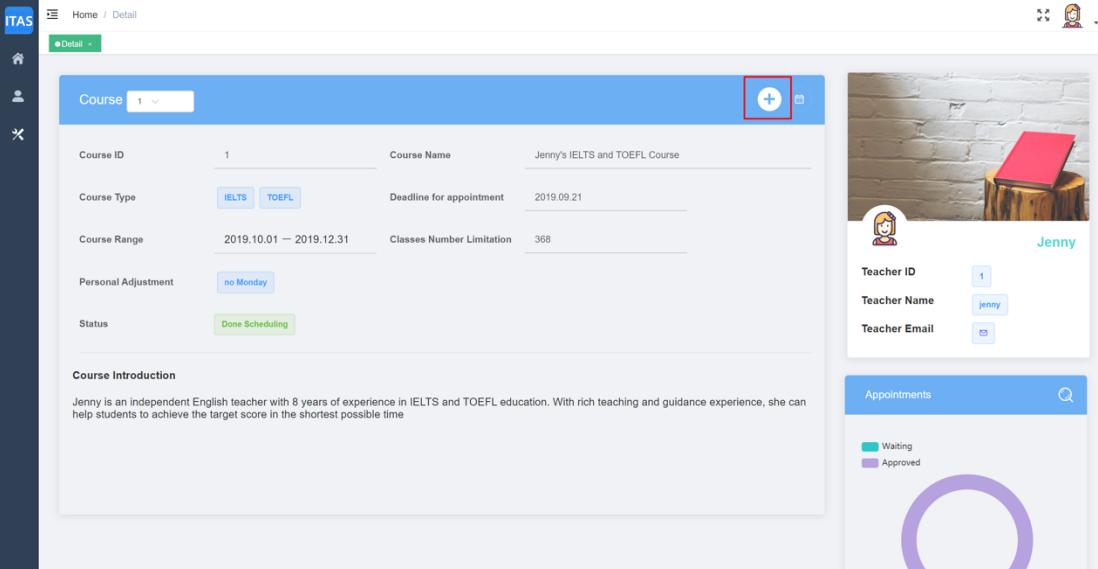
Login page

2.Teacher logs in to the system to create a new class.



The screenshot shows the ITAS system's course creation interface. On the left, there's a sidebar with icons for Home, Detail, and other functions. The main area has a blue header bar with the text 'Course' and a dropdown menu showing '1'. Below this, there are several input fields: Course ID (1), Course Name (Jenny's IELTS and TOEFL Course), Course Type (IELTS, TOEFL), Deadline for appointment (2019.09.21), Course Range (2019.10.01 — 2019.12.31), Classes Number Limitation (368), Personal Adjustment (no Monday), and Status (Done Scheduling). A 'Course Introduction' section contains a brief description of Jenny. To the right, there's a sidebar for 'Teacher Jenny' with fields for Teacher ID (1), Teacher Name (jenny), and Teacher Email (jenny@example.com). At the bottom right is a circular 'Appointments' section with a search icon.

clicks the detail button in left panel



This screenshot is similar to the previous one but shows the result of clicking the '+' button in the top right corner of the main form. The '+' button is highlighted with a red box. The rest of the interface remains the same, showing the course details and teacher information.

click “+” to create a new class

Course Info

* Course Name: Jenny's IELTS Course

* Course including Type: IELTS TOEFL

* Teacher: jenny

* Course Range: 2020-03-01 - 2020-05-31

Appointment Deadline: 2019-09-28 00:00:00

2019-09-28 00:00:00

<< 2020 February >>

Sun	Mon	Tue	Wed	Thu	Fri	Sat
26	27	28	29	30	31	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
1	2	3	4	5	6	7

nextStep >

set the start time, end time and the applying deadline of the class

Personal Adjustments

Available 1/6

- no Monday
- no Wednesday
- no Thursday
- no Friday
- no Saturday
- no Sunday

Selected 1

- no Tuesday

< preStep nextStep >

Personal Adjustments

Available 5

- no Monday
- no Thursday
- no Friday
- no Saturday
- no Sunday

Selected 2

- no Tuesday
- no Wednesday

< preStep nextStep >

add personal adjustment if he/she wants

Course Introduction

Jenny's IELTS Course

nextStep >

Add the class introduction

Confirm info

Course Name	Jenny's IELTS Course	Personal Adjustments
Course including Type	IELTS, TOEFL	no Tuesday, no Wednesday
Teacher	jenny	Introduction
Course Range	2020.03.01 — 2020.05.31	Jenny's IELTS Course
Appointment Deadline	2019.09.28	
Classes Num Limitation	632	

< preStep Submit Cancel

Our system will calculate the number of lessons automatically, click “submit” button to finish the create process

3. Students log in to the system and make appointments for the class

The screenshot shows the ITAS system interface. On the left, a sidebar has icons for Home, Detail, and a user profile. The main area displays course details: Course ID 3, Course Name 'Jenny's IELTS Course', Course Type 'IELTS TOEFL', Course Range '2020.02.01 — 2020.02.01', Teacher's Adjustments 'no Wednesday', and Course Status 'Collecting Appointments'. To the right, there is a teacher profile for 'Jenny' with details: Teacher ID 1, Teacher Name jenny, and Teacher Email. Below the teacher profile is a section titled 'My Appointment' with a button '+ Add an appointment'.

Choose the class he/she wants to apply

This screenshot is similar to the one above, showing the same course and teacher details. However, the '+ Add an appointment' button in the 'My Appointment' section is highlighted with a red box.

Click “+” to add the appointment

Basic Info

Course ID: 3

* Selected Type: IELTS (highlighted by a red box)

* Teacher ID: 1

Course Range: 2020.02.01 — 2020.04.30

nextStep >

Type in the basic information

Modules Info -- IELTS

Please enter your total score and each module's score for the entrance test

Listening	4.5	Reading	4.5	Speaking	4.5	Writing	4.5	Total	4.5
-----------	-----	---------	-----	----------	-----	---------	-----	-------	-----

Please enter your target score

Listening	6	Reading	6	Speaking	6	Writing	6	Total	6
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lecture number of each module (recommend)

Listening	0	Reading	0	Speaking	0	Writing	0	Total	0
-----------	---	---------	---	----------	---	---------	---	-------	---

Upload (highlighted by a blue arrow)

< preStep nextStep >

Type in the origin score and target score and click the “upload”

Modules Info -- IELTS

Please enter your total score and each module's score for the entrance test

Listening	4.5	Reading	4.5	Speaking	4.5	Writing	4.5	Total	4.5
-----------	-----	---------	-----	----------	-----	---------	-----	-------	-----

Please enter your target score

Listening	6	Reading	6	Speaking	6	Writing	6	Total	6
-----------	---	---------	---	----------	---	---------	---	-------	---

lecture number of each module (recommend)

Listening	7	Reading	22	Speaking	35	Writing	17	Total	8
-----------	---	---------	----	----------	----	---------	----	-------	---

Upload (highlighted by a blue arrow)

< preStep nextStep > (highlighted by a red box)

Then our system will recommend the number of lessons the student should take to achieve the goal

The screenshot shows the 'Personal Adjustments' step of the appointment booking process. On the left, a vertical navigation bar indicates steps 1 (Basic Info), 2 (Modules Info), 3 (Personal Adjustment), and 4 (Confirm). The main area displays a 'Personal Adjustments' section with two lists: 'Available' (containing days like Monday, Tuesday, Wednesday, Friday, Saturday, Sunday) and 'Selected' (empty). A red box highlights the 'no Thursday' checkbox in the 'Available' list.

Student can also add the personal adjustment according to his/her own need

The screenshot shows the 'Confirm info' step. The left navigation bar shows steps 1, 2, 3, and 4. The main area displays student information (Student ID: 47, Student Name: Rayne, Course Name: Jenny's IELTS Course, Course Type: IELTS, Course Range: 2020.02.01 – 2020.02.01, Teacher Name: jenny) and test results (Listening: 4.5, Reading: 4.5, Speaking: 4.5, Writing: 4.5, Total: 4.5). It also shows course details (In Entrance Test: Listening: 6, Reading: 6, Speaking: 6, Writing: 6, Total: 6; In Course: Listening: 7, Reading: 22, Speaking: 35, Writing: 17) and personal adjustments (no Thursday). A red box highlights the 'Submit' button at the bottom right.

Confirm the information and click to submit

The screenshot shows the 'Detail' page after submission. The left navigation bar shows step 4 (Confirm). The main area displays course details (Course ID: 3, Course Name: Jenny's IELTS Course, Course Type: IELTS, TOEFL, Course Range: 2020.02.01 – 2020.02.01, Teacher's Adjustments: no Wednesday, Course Status: Collecting Appointments) and teacher information (Teacher ID: 1, Teacher Name: jenny, Teacher Email: jenny@example.com). A red box highlights the 'My Appointment' section, which shows appointment details (Appointment ID: 11, Status: Waiting, Listening: 7, Reading: 22, Writing: 17, Speaking: 35).

Student can view the appointment at the detail page after finished

4. Teacher log in, approves the appointments and trigger the scheduling process

Course Detail

Course ID: 1 **Course Name:** Jenny's IELTS and TOEFL Course

Course Type: IELTS, TOEFL **Deadline for appointment:** 2019.09.21

Course Range: 2019.10.01 — 2019.12.31 **Classes Number Limitation:** 368

Personal Adjustment: no Monday

Status: Collecting Appointments

Course Introduction: Jenny is an independent English teacher with 8 years of experience in IELTS and TOEFL education. With rich teaching and guidance experience, she can help students to achieve the target score in the shortest possible time.

Teacher ID: 1 **Teacher Name:** jenny **Teacher Email:** jenny@nus.edu.sg

Appointments: Waiting (Green) Approved (Purple)

Click the magnifier to check the students' appointments

Course ID	Student	Teacher	Type	Status	Listening(Test)	Reading(Test)	Speaking(Test)	Writing(Test)	Total(Test)	Action
1	Jachsenx	jenny	IELTS	Approved	4.5	4.5	4.5	4.5	4.5	<button>Close</button>
2	jack	jenny	IELTS	Approved	4.5	4.5	4.5	4.5	4.5	<button>Close</button>
3	Leandro	jenny	TOEFL	Approved	15	15	15	15	60	<button>Close</button>
4	Wesley	jenny	IELTS	Approved	6.5	6.5	6.5	6	6.5	<button>Close</button>
5	Evie	jenny	TOEFL	Approved	20	21	28	21	90	<button>Close</button>
6	Kaya	jenny	IELTS	Approved	5.5	5.5	4.5	6	5.5	<button>Close</button>
7	Tyler	jenny	TOEFL	Approved	21	24	24	24	93	<button>Close</button>
8	Kathleen	jenny	TOEFL	Waiting	20	20	20	20	80	<button>Approve</button> <button>Close</button>
10	Doris	jenny	IELTS	Approved	4.5	4.5	5.5	5	5	<button>Close</button>

Approve the appointment

	Course ID	Student	Teacher	Type	Status	Listening(Test)	Reading(Test)	Speaking(Test)	Writing(Test)	Total(Test)	Action
>	1	jachsenx	jenny	IELTS	Approved	4.5	4.5	4.5	4.5	4.5	<button>Close</button>
>	2	jack	jenny	IELTS	Approved	4.5	4.5	4.5	4.5	4.5	<button>Close</button>
>	3	Leandro	jenny	TOEFL	Approved	15	15	15	15	60	<button>Close</button>
>	4	Wesley	jenny	IELTS	Approved	6.5	6.5	6.5	6	6.5	<button>Close</button>
>	5	Evie	jenny	TOEFL	Approved	20	21	28	21	90	<button>Close</button>
>	6	Kaya	jenny	IELTS	Approved	5.5	5.5	4.5	6	5.5	<button>Close</button>
>	7	Tyler	jenny	TOEFL	Approved	21	24	24	24	93	<button>Close</button>
>	8	Kathleen	jenny	TOEFL	Approved	20	20	20	20	80	<button>Close</button>
>	10	Doris	jenny	IELTS	Approved	4.5	4.5	5.5	5	5	<button>Close</button>

Our system show the different status

Course 1

Course ID	1	Course Name	Jenny's IELTS and TOEFL Course
Course Type	IELTS TOEFL	Deadline for appointment	2019.09.21
Course Range	2019.10.01 — 2019.12.31	Classes Number Limitation	368
Personal Adjustment	no Monday		
Status	Collecting Appointments		

Course Introduction

Jenny is an independent English teacher with 8 years of experience in IELTS and TOEFL education. With rich teaching and guidance experience, she can help students to achieve the target score in the shortest possible time.

Appointments

Waiting Approved

Course ID: 1 Course Name: Jenny's IELTS and TOEFL Course

Course Type: IELTS, TOEFL Deadline for appointment: 2019.09.21

Course Range: 2019.10.01 — 2019.12.31 Classes Number Limitation: 368

Personal Adjustment: no Monday

Status: Stopped Collection

Course Introduction
Jenny is an independent English teacher with 8 years of experience in IELTS and TOEFL education. With rich teaching and guidance experience, she can help students to achieve the target score in the shortest possible time

Appointments

Teacher ID: 1 Teacher Name: jenny Teacher Email: [Email](#)

Waiting Approved

Close the applying channel whenever the teacher wants

Course ID: 1 Course Name: Jenny's IELTS and TOEFL Course

Course Type: IELTS, TOEFL Deadline for appointment: 2019.09.21

Course Range: 2019.10.01 — 2019.12.31 Classes Number Limitation: 368

Personal Adjustment: no Monday

Status: Stopped Collection

Course Introduction
Jenny is an independent English teacher with 8 years of experience in IELTS and TOEFL education. With rich teaching and guidance experience, she can help students to achieve the target score in the shortest possible time

Appointments

Teacher ID: 1 Teacher Name: jenny Teacher Email: [Email](#)

Waiting Approved

Make our system start to schedule for he/she by just clicking the button

The screenshot shows a web-based course management system. On the left, a sidebar has 'ITAS' at the top, followed by icons for Home, Detail, and other navigation items. The main area has a header 'Home / Detail' and a sub-header 'Detail'. A blue bar at the top says 'Course 1'. A red box highlights a message box that says 'Still Scheduling, Please wait a moment!'. To the right of the message is a 'Check Calendar' button. Below the message are course details: Course ID (1), Course Name (Jenny's IELTS and TOEFL Course), Course Type (IELTS, TOEFL), Deadline for appointment (2019.09.21), Course Range (2019.10.01 — 2019.12.31), Classes Number Limitation (368), Personal Adjustment (no Monday), and Status (Scheduling). A 'Course Introduction' section below states: 'Jenny is an independent English teacher with 8 years of experience in IELTS and TOEFL education. With rich teaching and guidance experience, she can help students to achieve the target score in the shortest possible time.' To the right of the course details is a teacher profile for 'Jenny'. It includes a small profile picture of a woman, her name 'Jenny', and fields for Teacher ID (1), Teacher Name (jenny), and Teacher Email (jenny@example.com). Below the teacher profile is a section titled 'Appointments' with a purple circular progress bar.

Scheduling status

5. Both teacher and students can check the result after our system finished the scheduling

For teacher

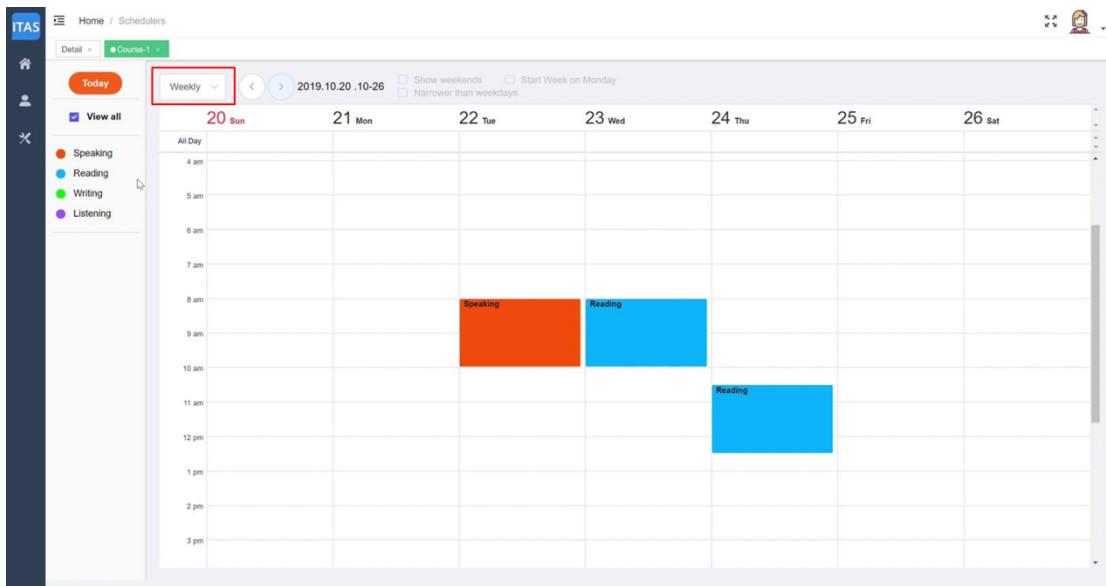
The screenshot shows the ITAS teacher dashboard. On the left is a sidebar with icons for Home, Detail, and Course-1. The main area displays course details for 'Course 1' (ID 1, Name: Jenny's IELTS and TOEFL Course, Type: IELTS, TOEFL, Range: 2019.10.01 - 2019.12.31, Limitation: 368). A red box highlights the '+' button. To the right is a teacher profile for 'Jenny' (Teacher ID 1, Name jenny, Email), and a section for 'Appointments'.

The screenshot shows the ITAS teacher dashboard with a weekly calendar view from September 29 to October 5, 2019. The calendar grid shows various speaking sessions for different students (Kathleen, Tyler, Kaya, jack, Leandro, Evie, jaichenx, Doris, Wesley) at specific times throughout the week. A legend on the left maps colors to student names. A red box highlights the 'Weekly' dropdown menu.

Weekly calendar of all courses and students (can choose other mode include:

Monthly calendar and Daily calendar)

For students



His/her own weekly calendar